

REPORT TO THE U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT

TRANCHE VI MONITORING AND VERIFICATION REPORT  
ON PERFORMANCE UNDER THE  
AGRICULTURAL POLICY REFORM PROGRAM  
AGRICULTURAL PRODUCTION AND CREDIT PROJECT

MINISTRY OF AGRICULTURE AND LAND RECLAMATION  
ARAB REPUBLIC OF EGYPT

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## EXECUTIVE SUMMARY

A Memorandum of Understanding (MOU) for the APC Policy Reform Component, 1990-93, between the Government of Egypt (GOE) and the United States Agency for International Development (USAID) was signed on Sept. 24, 1990. This MOU continues the program of economic policy reform of Egypt's agriculture sector began in 1986. It presented targets for the 1990-93 period.

In January, 1992 the MOU was amended to modify several Benchmarks for Tranche V. In September, 1992 the MOU was again amended with some modifications to all Benchmarks and the addition of a Benchmark dealing with farm machinery. These amended Benchmarks pertain to this Tranche VI report.

### NO. 1: COTTON

**Benchmark:** "The GOE agrees to proceed with establishing a free-market system for cotton production and marketing beginning with the cotton crop planted in CY 1993. The details of the plan to liberalize cotton production, marketing, ginning and exporting are attached as Annex A to this Memorandum. The detailed liberalization plan forms an integral part of this Benchmark.

Actions to be taken, and the timing of these actions, are summarized as follows:

By the end of November 1992, announce by a Ministerial Decree a floor price for the 1993 crop to protect cotton dealers against extreme price decline, eliminate all compulsory delivery of cotton and price control, allow free and equal access to all markets by any private or public trader, allow public trading companies and cotton gins to compete among themselves and with private traders and allow free marketing of cotton by-products.

Allow growers, beginning with the 1993 crop, full freedom to choose production practices, except for area allocation and varieties that will be restricted to zones determined by the government. Pesticides use by private sector will be permitted and may only be restricted according to accepted technical norms.

By the end of March 1993, develop a comprehensive plan to liberalize cotton ginning over a 2-3 year period and initiate actions conforming to the medium- and long-term recommendations contained in the annexed Plan (see sections III and IV of the attached Cotton Liberalization Implementation Plan).

By the end of March 1993, announce by a Ministerial Decree the re-opening of Mina El Bassal as a spot market with facilities available to all traders and brokers to handle the cotton crop planted in CY 1993."

### Performance:

- o The laws and decrees necessary to legalize the private sector trading of cotton, purchase and sale of cotton by gins, and the operation of the cotton spot market have been drafted, they have been approved by the State Council and have been presented to the Peoples Assembly for approval. But as of Jan. 15, 1994, these laws have not been approved by the Peoples Assembly. Thus, privatization did not occur during the 1993/94 cotton marketing year. It is anticipated that this approval will occur prior to planting time for cotton in 1994 and thus the 1994/95 cotton season will allow private sector participation in marketing.
- o A preliminary liberalization and privatization plan for the ginning sector was prepared by the Cotton Trade and International Company. This plan presented strategies that the sector intends to follow which will allow the private sector open access to ginning facilities in the 1994/95 cotton marketing season. The plan also indicates that a more detailed financial analysis of individual gins and the ginning sector is needed before privatization of individual gins or ginning companies can be completed.
- o Data from farmer surveys indicate some confusion on the part of producers in regard to their production freedoms. Many indicated a large degree of freedom in production decisions during 1993 but some producers felt restrained by the crop rotation. It has not been definitely determined whether these feelings of restraint result from governmental regulations or from technical or social constraints to comply with the cropping plans of their neighbors.
- o Surveys indicate that the vast majority of farmers expected to see private sector marketing of cotton and the reopening of the cotton spot market in 1993, but a substantial fraction of both producers and potential merchants did not believe they would be free to retain cotton and have it ginned or to sell cotton to a gin.
- o Surveys of farmers indicated an expectation of prices equal to or higher than the prices received in 1992. Floor prices for cotton for 1993 were not clearly announced but frequent GOE announcements suggested that cotton prices for 1993 would be the same or higher than in 1992. After no action was taken on privatization of cotton marketing in the 1993 season, cotton procurement prices for cotton trade companies were first announced on Sept. 7 1993 and later modified for ELS varieties on October 10, 1993.

## NO. 2: RICE

**Benchmark:** "The quota for mandatory delivery of rice to the government was eliminated ahead of schedule. All remaining GOE prohibitions and restrictions on possession, milling, transport, marketing and export of rice by the private sector will be eliminated. Private sector rice exporters will be free to export rice at prices set according to market forces. The rice export committee will carry out regulatory and quality control functions without restricting, by any means, the exportation of rice by the private sector."

### **Performance:**

- o No evidence was found of any GOE restraints on free domestic trade of rice among producers, merchants or millers.
- o The rice export committee has attempted to guide rice exports through target prices and quantities but no evidence was found that this committee has interfered with exports of milled rice. The private sector has increased its share of the export market of milled rice from 10 percent in its first year of operation, 1991/92, to 50 percent in its second year of operation, 1992/93.
- o Decree 458/1993 of the Minister of Economy and Foreign Trade clearly specifies that export prices on agricultural commodities are "guiding" prices only and that rice exporters can export either paddy or milled rice, and without the need of an export license. The policy of free trade in rice was reaffirmed by an announcement by the Prime Minister on 12-6-1993.
- o Privatization of public sector rice mills has been initiated and additional steps are planned for the 1993 rice marketing year including the sale, leasing, or custom operation of the mills. **These actions represent policy reforms that were not required in the Benchmarks for Tranche VI but contribute toward meeting the longer-run goals of the APCP policy reform program.**

### **NO. 3: FERTILIZER PRICES**

**Benchmark:** "By the end of CY 1992, the retail prices of fertilizer handled by public sector distributors will be adjusted to reflect:

- revision of ex-factory prices so that the price of each type of fertilizer is within 12 percent of the international, or border prices, with adjustments for quality. PBDAC will purchase fertilizer from local factories at competitive prices and terms with private dealers and cooperatives;
- elimination of all subsidies on newly purchased fertilizer as of July 1, 1992 (with the possible exception of potassium sulfate); and
- adjustment of marketing margins and commissions between factory and retail points of sale to a full commercial basis."

#### **Performance:**

- o Ex-factory prices of locally produced urea, AN and both types of phosphates were within 8 percent of border prices at the end of CY 1992. The ex-factory price of CN was 31 percent above the estimated border price and the price of AS was 24 percent above the border price. However, CN and AS together represent only 3 percent of total nitrogen produced in Egypt. Thus the weighted average ratio of ex-factory to border prices for all nitrogen was 105 and 102 for all phosphorus production.  
  
Due to the variability and trends in world prices, comparisons of ex-factory prices and border prices should be made periodically during each year.
- o GOE budgetary subsidies on fertilizer are continuing to decline. The subsidization of fertilizer imports through a favorable exchange rate was discontinued in July 1991. The GOE budget for FY 92/93 allowed a subsidy of LE 33 M. to be used exclusively on potassium sulfate and it is estimated that the actual subsidy cost for FY 1992/93 was LE 30. M.
- o Marketing margins in the fertilizer markets are being set by the private sector and, thus, PBDAC's margins are not interfering with the private sector marketing operations.
- o **Thus, all aspects of this Benchmark relating to fertilizer pricing have been met.**

#### **NO. 4: LIVESTOCK FEED INGREDIENTS**

**Benchmark:** "By the end of March 1993, wheat bran and cotton seed cake will be freely traded at prices set according to market forces."

**Performance:**

- o The GOE currently is the sole source of cottonseed cake but this situation will likely change with the privatization of cotton marketing.
- o The manufacturing of animal feeds is shifting from traditional feeds to non-traditional feeds with accompanying adjustments in prices.
- o Data from public sources and from feed manufacturers indicate that wheat bran and cottonseed cake are available, to all feed manufacturers, thus, meeting this Benchmark.



## **NO. 5: COTTON PEST CONTROL**

**Benchmark:** "By the end of March 1993, charges for cotton pest control, for the cotton crop to be planted in CY 1993, will be adjusted so that the combined total of explicit and implicit government subsidies will be announced and reduced by 25 percent of the 1992 level according to the liberalization plan of cotton in C.1 above."

Note: Item No. 4 of Sec. IV of the liberalization plan reads as follows: "Government supervision of the pest control program should be continued but price controls and subsidies on pest control materials eliminated gradually and producers and private contractors encouraged to carry out approved pest control measures."

### **Performance:**

- o The new system of charges to farmers for pest control initiated in 1991 is gradually shifting the pest control costs and operations to the producer. Farmers in 1992 incurred greater charges under the government pest control program and also spent more on their own pest control programs than in 1991.
- o Survey results indicate that most cotton producers prefer to operate their own pest control program independent of the government, but the same survey also shows that less than half of the producers felt confident that they could operate such a program themselves. Many producers do not know what chemicals to use, or where they could obtain the needed chemicals or equipment. GOE needs to expand its educational program on cotton pest control before it can safely and completely withdraw its supervision of the program.
- o The total costs of the governmental pest control program rose substantially in 1992 primarily due to inflation in costs of application. The total subsidy increased from LE 200/FD in 1991 to LE 254/FD in 1992.
- o Farmers paid approximately 28 percent of total cotton pest control costs in 1992.
- o The pest control program designed for 1993 was expected to reduce costs through a reduction in the rates of use of chemicals, through substitution of pheromones for chemicals on some cotton, and by passing on more costs to the farmer. Preliminary data indicate a 23 percent reduction in 1993 in the subsidy per feddan of cotton.
- o **Thus, substantial progress was made in shifting costs and pest control operations to the farmer and in attainment of this Benchmark.**



## NO. 6: INPUTS DISTRIBUTION

**Benchmark:** "The MALR will adjust marketing policies for farm inputs so as to reduce the quantities of commercial farm inputs marketed by the public sector using the following guidelines.

- a. Private sector dealers will be permitted to trade and transport all farm inputs except cotton seed for planting.
- b. By the end of FY 1992/93, all fertilizer dealers (PBDAC, cooperatives, and other private dealers) will have access on competitive terms to imported and locally produced fertilizers. Local factories' annual sales of fertilizer to PBDAC will not exceed the following amounts:
  - 3.0 million tons of nitrogen (15.5 percent nutrient content),
  - 0.5 million tons of phosphate (15 percent nutrient content).
- c. By the end of calendar year (CY) 1992, public sector distribution of low priced 'unified' livestock feed will be discontinued.
- d. By the end of CY 1992, imports and marketing of corn by PBDAC will be eliminated."

### **Performance:**

- o Private sector fertilizer distributors and merchants have rapidly expanded their share of the fertilizer market. GOE interference is minimal, causing concern only in regard to the licensing of merchants. A large number of unlicensed merchants are operating and providing useful distribution services to farmers.
- o PBDAC received deliveries of only 319,000 tons of 15.5 percent nitrogen and 8,300 tons of 15 percent phosphate from domestic factories in FY 92/93, well below the target amounts of 3.0 million tons of nitrogen and 0.5 million tons of phosphate. **Thus, PBDAC has reduced its role in the distribution of fertilizer at a much faster rate than required by the reform Benchmark.**
- o PBDAC is discontinuing feed distribution as it eliminates its inventories.
- o PBDAC discontinued the importation of yellow corn in January, 1992.
- o **Thus, MALR reforms in the area of inputs distribution succeeded in producing more rapid change than was required by this Benchmark.**

## **NO. 7: SUBSIDIZED AGRICULTURAL CREDIT**

**Benchmark:** "The system for subsidized farm credit for crop production will be reviewed by PBDAC with the intention of concentrating the benefits on farmers who bear the burden of producing low-priced, government-controlled crops or who are undertaking new activities that need promotion. FY 1992/93 interest subsidies on agricultural loans will not exceed the level of LE 100 million per year."

### **Performance:**

- o The volume of crop production loans on which interest is subsidized declined substantially in FY 92/93 due primarily to the elimination of rice as a subsidized crop.
- o For the crop year 1992/93, subsidized crop production loans were limited to 5 strategic crops and loan limits (LE/FD) were established for these crops. Interest subsidies on crop production loans in FY 92/93 were estimated at LE 23.4 M.
- o Interest subsidies on mechanization and food security loans were discontinued as of October, 1992 and the estimated maximum subsidy on investment loans in FY 92/93 is LE 9 M.
- o Total interest subsidies for all agricultural loans has declined from LE 92 M. in FY 90/91, to LE 64.8 M. in FY 91/92 and were estimated at LE 32.4 M. in FY 92/93 which is well below the agreed upon benchmark limit of LE 100 M.
- o **Thus, the GOE reforms far surpassed the Benchmarks established for interest subsidization.**

## **NO. 8: PBDAC FINANCIAL REFORMS**

**Benchmark:** "PBDAC will adopt measures to improve its financial condition, including:

- a. Prepare a phased implementation and financial plan acceptable to PBDAC and USAID by December 31, 1992 to substantially reduce redundancy of employees resulting from the divestiture of PBDAC input distribution activities. Upon the completion of the financial plan, initial steps will be taken no later than March 31, 1993 in executing the plan adopted to reduce redundancies of employees.
- b. The private sector will be allowed to rent PBDAC storage facilities. In addition, by the end of March, 1993 PBDAC will conduct a study and prepare a phased plan acceptable to both PBDAC and USAID to sell, rent or otherwise divest itself from the operation of storage warehouses, including the existing and the new planned facilities, except those justified for bank lending operations. Focus should be on facilities owned by PBDAC.
- c. The following requirements will be implemented:
  - use of the loan classification system called for by the Central Bank of Egypt (CBE) to define and write-off all loans classified un-recoverable;
  - an annual reconciliation of accounts receivable with GOE and negotiate to either: 1) collect the balances due, 2) accrue interest on balances due, or 3) write off the balances due."

### **Performance:**

- o PBDAC has initiated a voluntary early retirement program to reduce redundancy of employees involved in non-banking activities. As of May 24, 1993, 1,415 employees had applied for early retirement. These applications were processed on June 15, 1993. A three year plan for personnel reduction was prepared and submitted to USAID for approval.
- o PBDAC has begun to lease its excess capacity in storage warehouses. As of June 30, 1993 approximately 5 percent of PBDAC's warehouse space was being rented but over 80 percent of the total available space was unused.

PBDAC presented a preliminary proposal to reduce excess warehouse capacity following the recommendations of the consultancy report. The plan outlined the remaining problems and the steps to be taken and target dates to accomplish these steps. The PBDAC agreed to reduce its storage facilities by 25 percent by Dec. 31, 1994 if several legal problems can be dealt with.

- o The PBDAC has made progress on loan classification and is arranging settlement of all bad loans.
- o The PBDAC has held an annual reconciliation of accounts with the GOE (Ministry of Finance) but has not been successful in getting the GOE to pay the net amounts due to PBDAC.

## NO. 9: SEED REFORMS

**Benchmark:** "The MALR will continue to implement reform measures in the agricultural seed processing and marketing sector including:

- show progress toward the ratification and the adoption of new national seed legislation as reviewed by the National Seed Council(NSC) and as recommended by the 1991 National Seed Conference which establishes a seed policy formulation mechanism, seed quality standards, standards for certification and seed protection, general provisions for seed trade, and a schedule of fees to cover the cost of the regulatory and support services provided by the Central Administration of Seeds (CAS);
- proceed with CAS reorganization and privatization of the MALR seed processing plants according to the phased plan agreed upon in Tranche V and show achievements of specific steps pursuant to the agreed upon timetable.
- The following benchmark is included for the cotton seed processing and marketing sector: completion of a phased plan by December 31, 1992 acceptable to both MALR and USAID to liberalize certified cotton seed production and processing."

### **Performance:**

- o Enabling legislation needed for privatization of the seed sector have been drafted. The new draft laws are now under review by the National Seed Council and will be ready for technical review by Feb. 1994. **Delays in passage of this legislation have not hampered reforms in reorganization of seed production, distribution or of seed policy.**
- o The new National Seeds Council has been fulfilling its role in providing leadership, overall guidance and formulating policy for seed reform since June 1992.
- o Reorganization of CAS required approval by the Central Agency for Organization for Management. This approval was obtained in late 1993.
- o Private sector and co-operative firms have, as yet, shown no interest in purchasing MALR seed processing plants but some contracts have been signed for the rental and custom use of some of these plants. Custom and rental use will hopefully lead to later sale of these seed plants.
- o Privatization of the production and distribution of self-pollinated seeds has been delayed by disagreement over seed pricing policy. Targets for privatization of seed distribution for the winter 1992-93 season or summer 1994

were not met. However, **steps toward privatization of rice seed production were initiated in the summer of 1993 and similar steps were made on wheat and bean seed production in the winter 1993-94 season.**

- o The privatization of cotton seed was studied by a consultant in September, 1993. The Consultant's report indicates a need for improvement in cotton seed technology before privatization will likely proceed. CAS has initiated steps to improve cotton seed technology in 1994 through mechanical delinting.
- o **Thus, progress is being made on all aspects of the seed reform program.**



## **NO. 10: AGRICULTURAL MACHINERY**

**Benchmark:** "All restrictions on the importation, trade, marketing and manufacturing of agricultural machinery by private sector will be eliminated."

### **Performance:**

- o Based on the review of the latest official decrees, and the reactions of the agricultural machinery marketing sector, importation, manufacture, or trade of farm machinery is permitted.
- o The 50 percent customs duty on the importation of small tractors remains as a protection to the local manufacturing industry.
- o The complete ban on importation of farm machinery has been removed. The extent to which the 50 percent customs duty on small tractors will restrict their imports is unknown.

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## INTRODUCTION

A Memorandum of Understanding (MOU) for the Policy Reform Component of the Agricultural Production and Credit Project (APCP) between the Government of Egypt (GOE) and the United States Agency for International Development (USAID) was signed on Sept. 24, 1990. This MOU continues the program of economic policy reform of Egypt's agriculture sector initiated in 1986. It presented general targets for the 1990-93 period and specific targets for Tranche IV of the program.

It was agreed by the GOE and USAID that this phase of the economic reform program should emphasize increased cotton procurement prices, liberalization of rice marketing, elimination of farm input subsidies, divestiture and liberalization of farm input supply activities of the Principal Bank for Development and Agricultural Credit (PBDAC), and financial strengthening of PBDAC as a sound credit institution.

In January, 1992 the MOU was amended to modify, and more clearly specify the several Benchmarks for the 1991 year and to be reported on in the Tranche V report. In September, 1992, the MOU was amended for the second time with some modifications to all Benchmarks and the addition of a Benchmark dealing with farm machinery. A total of ten Benchmarks were specified in this second amendment. These amended Benchmarks are reported on in this Tranche VI report.

In this report, each Benchmark will be reported in a separate Chapter. At the beginning of each Chapter a short introduction will be presented which will provide some background information. The entire Benchmark will be included as it appears in the second amendment to the MOU, and then the Ministerial decrees and survey results will be discussed which verify the reforms completed.

## BENCHMARK NO.1

### COTTON POLICIES

#### Introduction

The GOE has in recent years made reforms in increasing the farmgate price of cotton as a percentage of border prices and farmers have been given more freedom in production decisions. Cotton quotas are specified as "indicative" or "guiding" quotas, but are not compulsory. Cotton marketing is still entirely public controlled. The Benchmarks for Tranche VI call for liberalization and privatization of cotton marketing.

**Benchmark:** "The GOE agrees to proceed with establishing a free-market system for cotton production and marketing beginning with the cotton crop planted in CY 1993. The details of the plan to liberalize cotton production, marketing, ginning and exporting are attached as Annex A to this Memorandum. The detailed liberalization plan forms an integral part of this Benchmark.

Actions to be taken, and the timing of these actions, are summarized as follows:

By the end of November 1992, announce by a Ministerial Decree a floor price for the 1993 crop to protect cotton dealers against extreme price decline, eliminate all compulsory delivery of cotton and price control, allow free and equal access to all markets by any private or public trader, allow public trading companies and cotton gins to compete among themselves and with private traders and allow free marketing of cotton by-products.

Allow growers, beginning with the 1993 crop, full freedom to choose production practices, except for area allocation and varieties that will be restricted to zones determined by the government. Pesticides use by private sector will be permitted and may only be restricted according to accepted technical norms.

By the end of March 1993, develop a comprehensive plan to liberalize cotton ginning over a 2-3 year period and initiate actions conforming to the medium- and long-term recommendations contained in the annexed Plan (see sections III and IV of the attached Cotton Liberalization Implementation Plan).

By the end of March 1993, announce by a Ministerial Decree the re-opening of Mina El Bassal as a spot market with facilities available to all traders and brokers to handle the cotton crop planted in CY 1993."

## DECREES<sup>1</sup>

### Liberalization of the domestic cotton market

A joint memo from the Ministers of Agriculture and Land Reclamation and Economy and Foreign Trade issued on Dec. 29 1992 outlined the plans of the GOE to privatize domestic cotton marketing (Figure 1.1). The GOE planned to discontinue compulsory delivery of cotton to co-operative collection centers in 1993 with these collection centers remaining open for a 2-3 year transitional period to give farmers an alternative market outlet in case the private sector is not adequate.

This memo (Figure 1.1) discussed the procedures for establishing annual floor prices for cotton, giving dealers authorization to export cotton and to trade in ginning by-products, authorizing ginning companies to compete in ginning cotton and the privatization of public gins.

Three Presidential decrees to legalize domestic private sector trade in cotton and by-products, the cotton spot market, and the cotton Exporters Union have been drafted (Figure 1.2). As of March 31, 1994 the two decrees regarding the domestic trade and the spot market operations have been reviewed by the State Council, have been signed by the President and have been submitted to the Peoples' Assembly by the Cabinet. These two draft laws have been extensively discussed on the floor of the People's Assembly.

The decree establishing the rules for the cotton exporters union has been approved by the State Council and sent back to the Cabinet. It will be formally transmitted to the Peoples' Assembly at the next meeting of the Cabinet.

These decrees cancel all previous laws and decrees which prohibited private sector trade in the domestic or export cotton markets. Also, these decrees outline in detail the procedures for licensing of private domestic cotton traders, rules for registration of brokers in the Spot Market, rules for settling appeals and disputes in the domestic and spot markets, and the structure of the Exporters Union. The Ministerial decree needed to implement the Presidential decree for the spot market is given in Figure 1.3.

As to Dec. 2, 1993 the People's Assembly had not ratified the Decrees needed to liberalize cotton marketing and in response, USAID granted the GOE an extension until December 31, 1993 for

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English translations of the official decrees and other documents regarding cotton are included in Annex I.

completion of this portion of the Benchmark (See Figure 1.4, Annex I). This deadline was further extended orally.

As of March 31, 1994 these laws have not been passed but have been fully discussed in the Peoples Assembly and ratification is expected in the very near future.

In preparation for privatization of the cotton market, the registration of private sector cotton traders has been initiated.

In this regard the major Party has recommended that the capital requirement of LE 50,000 be reduced to LE 40,000 and the cash deposit of LE 5,000 be reduced to LE 4,000 to encourage more individuals to register as cotton traders (See Figure 1.2).

The cotton spot market, (Mina el Bassal) in Alexandria has been prepared for the 1994/95 marketing season. The physical facilities and the necessary staff are being prepared for the coming season.

A survey of 300 farmers conducted at the time of cotton planting (March, 1994) in the nine major cotton producing governorates reveals that the majority (77 %) of these farmers expect that private merchants will be able to trade cotton during the 1994/95 season.

**Thus, the GOE, the cotton producers, and the private sector traders fully expect that the 1994/95 cotton marketing season will become privatized.**

### **Cotton floor prices for 1993/94**

Figure 1.5 contains decree No. 710 of 1992 by the Minister of Economy and Foreign Trade which formed a committee to make recommendations on floor prices for lint cotton for the 1993/94 cotton marketing season. This Decree was issued on 27-12-1992. Figure 1.6 contains the recommendations of this committee on floor prices for the 1993/94 market year. The committee recommendations were based on the principle of establishing a floor price for cotton which would make cotton competitive with other crops as determined by cost and return budgets. These recommendations were made in time to permit announcement of floor prices near the time of cotton planting but no floor prices were announced at that time.

Figure 1.7 contains Ministerial Decree No. 344 of 1993 which announced a set of prices for cotton to be paid by the cotton exporting companies for lint cotton. One unique aspect of this decree is that for the first time it calls for including the value of the cotton seed when determining the price to be paid to the producer for the cotton. This Decree was issued on Sept. 7,

1993 which was near the time of the starting of the cotton harvest.

These cotton prices were similar to cotton procurement prices paid in the 1992/93 season for long staple cotton varieties but LE 30 per kantar lower for extra long staple varieties.

The lint cotton prices for five varieties of cotton; Giza 45, 70, 76, 77, and 84, as specified in Decree No. 344 were modified by Ministerial Decree No. 418 issued on Oct. 10, 1993 (Figure 1.8). This modification increased the prices of these five extra long staple varieties by LE 18 per kantar.

As shown by the survey results presented in Figure 1.13, in December of 1992, most farmers who were planning to grow cotton in 1993 were expecting a cotton price in 1993 that was equal to or higher than the price they had received in 1992. This expectation had been based on frequent news articles from the GOE which had not firmly set cotton prices but had given these indications.

The procurement prices announced in early Sept, 1993 in Decree No. 344 were lower than the prices discussed earlier in late 1992 and early 1993. The lower prices resulted from a response by the GOE to declining world market cotton prices. However, political pressure from farmers prompted the GOE to raise the prices of some varieties slightly as announced in Decree 418. This price increase put the cotton procurement prices of some varieties above world market prices and, thus, losses to the GOE as described in Figure 1.9 (Annex I).

### **Cotton floor prices for 1994/95**

Floor prices of LE 250 per kantar for long staple cotton and LE 300 for extra long staple cotton varieties for the 1994/95 market season were announced prior to the cotton planting season of March of 1994. This announcement was made public through speeches by Minister of Agriculture officials and by articles in the newspapers.

### **Liberalization and privatization of the cotton gins**

Figure 1.10 contains a letter from Mr. M. Nour, Vice Chairman of PBDAC and Executive Director of APAC to Mr. Ahmed Shouman, chairman of the Holding Company for Cotton Affairs regarding a scope of work (SOW) for a cotton gin privatization study (Figure 1.11). Under this SOW a cotton ginning specialist would have developed a plan to privatize the cotton gins. All parties gave their concurrence on this plan, however, the expatriate ginning specialist selected for this task was not available during 1993 and the study was not done.

However, a preliminary liberalization and privatization plan was presented by Mr. Shouman, Chairman of the Board of Cotton Trade and International Company to USAID in December, 1993 (Figure 1.12). It presents the strategic plans of the industry and intentions to liberalize cotton ginning beginning with the 1994/95 cotton marketing season, and complete privatization of the public sector cotton gins in 5 years.

This plan calls for a more comprehensive study of the ginning sector before complete privatization can be attained. The plan also indicates that the GOE will begin to deal with the problem of redundant labor in the cotton ginning sector.

## **SURVEY RESULTS**

A series of surveys were made during the winter of 1992-93.<sup>2</sup> These surveys were made to determine producers and merchants knowledge of the cotton policies and their intended reactions to these policy changes.

### **First survey of farmers**

The first survey of farmers conducted between December 15, 1992 and January 6, 1993 consisted of 102 farmers in 11 governorates distributed in proportion to the 1992 cotton area planted (Fig. 1.13). This survey was conducted to determine if farmers were, at that time, aware of changes in the GOE policies and if not, what further information must be given to farmers regarding the policy changes.

The survey results indicated that at the time of the survey three fourths of the sample farmers expected that the GOE intended to privatize the cotton marketing system in 1993. This change is intended to permit private merchants to buy and sell cotton and reopen the cotton spot market. At that date most farmers (93%) expected cotton prices in 1993 to be higher than 1992, and 88 percent of the sample farmers intended to produce cotton in 1993, which is a higher percent than during the past three years.

The survey illustrated that farmers knew little about the possibilities in 1993 to gin their own cotton or to sell their cotton to gin operators. This is a drastic change from prior years when private ginning of cotton was unlawful. Additional time may be needed before farmers will participate in ginning activities.

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An English translation of the questionnaires used in these surveys, and the response codes are available in Annex IX. The data files resulting from these surveys are listed in Annex X.



Figure 1.13. Results of first cotton farmer survey.

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**RESULTS FROM:**

**SURVEY OF COTTON PRODUCERS  
KNOWLEDGE OF 1993 POLICIES**

**OBJECTIVE OF SURVEY:** The major purpose of this survey is to determine if farmers have knowledge of the governments cotton marketing and production policies for 1993.

I. Identification. OFFICE ID No. \_\_\_\_\_

Governorate: \_\_\_\_\_

District: \_\_\_\_\_

Village: \_\_\_\_\_

Name: \_\_\_\_\_

1. Area of land holding: FD \_\_\_\_\_ Kerat \_\_\_\_\_

2. Year and area of cotton grown:

**Percent of sample who grew cotton in:**

1990	65
1991	52
1992	87

Knowledge of the 1993 cotton program

1. Have you heard any official announcements or decrees about the 1993 cotton crop? **YES- 93 % NO- 7 %**

2.A. Will you plant any cotton next season? **YES- 88 % NO- 12 %**

B.If NO, Why not?-

**Ten of the 12 farmers who said they will not plant cotton responded, "limited by rotation".**

C. If YES, **More - 42 % Less - 14 % Same as before - 43 %**

D. If YES, Why? **crop rotation - 48 %  
prices may be increased - 33 %**

3. Have you heard any announcements about:

[ENUMERATOR: Repeat the above phrase for each question.]

a. cotton prices for 1993? **YES- 66 % NO- 34 %**  
do you expect cotton prices to be higher- **97 % or lower- 3 %**

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Figure 1.13. Cont.

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- b. freedom to plant as much cotton as you want without any fines:  
YES - 67 % NO- 33 %
- c. freedom to plant cotton when you want to without fines?  
YES- 58 % NO - 42 %  
will you plant earlier? YES- 99 % NO - 1 %
- d. freedom to sell cotton to private dealers?  
YES- 76 % NO- 24 %
- e. freedom to take cotton to a gin and have it ginned?  
YES - 15 % NO - 85 %
- f. freedom to sell cotton to a gin?  
YES - 36 % NO - 64 %
- g. the opening of the cotton Bourse(spot market) in 1993?  
YES - 84 % NO - 16 %

#### Freedom of decision making

1. Do you feel completely free in regard to making decisions on cotton production in 1993? YES - 64 % NO - 36 %  
If NO, what constraints on production still remain?

**70 % of those who felt lack of freedom(26 of 37 farmers) replied "required to plant cotton because crop is very important for export for the government."**

2. Do you feel completely free in regard to making decisions on cotton marketing in 1993? YES - 68 % NO - 32 %

If NO, what constraints on marketing still remain?

**47% (16 of 34 farmers) of those who felt a lack of freedom responded "afraid private merchants may lower the prices of cotton".**

**and 41% (14 of 34 farmers) responded "afraid of a general reduction in the price of cotton".**

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The official crop rotation was cited by 10 farmers (10%) as the reason why they would not grow cotton in 1993. Also, 26 farmers reported a lack of freedom in decision making in production due to the rotation plan. Also, only 58 percent of the farmers felt they could freely plant what they wanted to without fear of fines. Clearly, the rotation system is restraining some producers in their production decisions.

#### **Second survey of farmers**

A second survey of farmers was conducted in April, 1993 to determine farmers intentions in regard to cotton production and marketing practices in 1993 and to determine if any differences could be detected in farmers knowledge of the 1993 cotton program since the first survey. This survey was purposely conducted during and immediately after cotton planting. The sample included 300 producers in the nine major cotton governorates.<sup>3</sup>

Approximately 3/4ths of the farms included in the sample produced cotton each of the last three years (Table 1.1). The area planted per farm increased slightly over the three year period. On average, about 40 percent of the land holding of the sample farms was in cotton each year.

Table 1.1. Characteristics of sample farms,  
second survey of farmers.

Item	Type of cotton		Total sample
	LS	ELS	
Sample size	187	113	300
Land holding (FD/farm)	6.88	8.22	7.39
Cotton area (all sample)			
1990 (FD/farm)	1.99	2.51	2.18
1991 (FD/farm)	2.04	2.52	2.22
1992 (FD/farm)	2.14	3.15	2.52
Farms growing cotton		(Percent)	
1990	76	76	76
1991	76	74	75
1992	81	82	82
Cotton area on farms that grew cotton			
1990 (FD/farm)	2.60	3.29	2.86
1991 (FD/farm)	2.69	3.39	2.95
1992 (FD/farm)	2.63	3.83	3.09

Source: Field survey in April, 1993.

A majority of the sample farmers in the second survey (78%) felt that they had full freedom in production decisions on cotton for the 1993 year (Table 1.2). In the first survey of farmers 64 percent gave the same response. This change was statistically significant. Of those who felt that any constraint still remained (66 producers), 82 percent felt they were constrained by the cropping rotation. In the first survey of farmers the crop rotation was also mentioned as the major constraint on production decisions.

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The same sampling plan was used here as had been used earlier in the cotton pest control survey, See Chapter 5.

It is difficult to isolate definitively if this response reflects a reaction to the setting of cotton quotas by the government or is the farmers' recognition that from a technical standpoint it is necessary for him to follow a specific crop rotation. More probing would be necessary to specify the cause for this feeling. (The arabic words used indicate this response was predominately a reaction to a technical constraint, not a government constraint).

Table 1.2. Cotton production intentions for 1993,  
second survey of farmers.

	Type of cotton		Total
	LS	ELS	sample
<b>Have full freedom in production decision making</b>	(Percent of sample)		
Yes	77	79	78
<b>Remaining constraints:</b>	(Percent of group)*		
Crop rotation requirement	77	92	82
No decrees have been issued as yet	12	4	9
Required to grow cotton because it is important for export for the government	9	4	7
<b>Have been given a cotton quota for 1993</b>	(Percent of sample)		
Yes (percent)	93	86	90
Cotton quota (FD for all sample)	442.2	380.8	823.0
(FD/Farm)	2.54	3.92	3.05
<b>Will grow cotton in 1993.</b>	(Percent of sample)		
Yes	94	99	96
No	6	1	4
<b>Will grow more than quota</b>	9	16	12
less than quota	2	3	2
only quota	89	81	86
<b>Area to be planted(FD)</b>	460.8	418.3	879.1
Percent increase over quota	4.2	9.8	6.8
<b>Why plan to grow more than quota</b>	(Percent of group)		
Cotton is profitable	75	44	59
Prices may increase	31	28	29
Yield may increase	19	11	15
<b>Why will plant cotton quota:</b>	(Percent of group)		
crop rotation	53	45	50
growing cotton is profitable	30	37	33
prices may be increased	15	26	19
yield may increase next year	12	16	14
<b>Why will not plant any cotton.</b>	(Percent of group)		
limited by rotation crops	42	0	38
price for next year is unknown	17	0	15
too much labor needed	17	0	15

Source: Field survey in March-April, 1993.

\* Percentages based on those who indicated remaining constraints on production decisions.

### **Cotton quotas**

Most of the sample farmers (90 %) had been issued a cotton quota for 1993. The size of the assigned cotton quotas were about equal to the quotas assigned in recent years.<sup>4</sup> The issuing of cotton quotas to farmers appears to many farmers as a possible requirement to produce cotton. The enforcement of such quotas is not clear from official decrees and was not completely investigated in this survey.<sup>5</sup>

### **Planting intentions**

The survey results indicated that the area planted to cotton will likely increase in 1993. Several farmers without quotas said they will plant cotton in 1993 over 1992. Of the total sample of 300, 30 farms had not been assigned cotton quotas but 18 of these indicated they would plant cotton. Among those farmers who were given quotas, 86 percent will plant their quota, 12 percent will plant more than their quota, and only 2 percent will plant less than their quotas. In terms of area to be planted, the sample farms will plant about 7 percent over their quota. This percentage is almost 10 for ELS cotton and about 4 for LS.

Those who plan to exceed their quotas said they will do so because they think cotton will be profitable in 1993. Among those who will grow their exact quota, many also indicated optimism about cotton profitability and about half say they will grow their quota because of the rotation. It is not clear if the

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It appears that the sample was drawn primarily from among farms that were assigned quotas for 1993, not randomly from all farms. Cotton quotas are rotated among farms so that different farmers are selected each year to grow cotton. Thus, comparisons between 1993 and earlier years for this sample, in terms of percent growing cotton, are not very meaningful.

Cropping rotations for the use of land of each village are usually drawn up at the village level as a part of the activities of the village co-operative. Since most land parcels are very small, the use of any parcel may effect the use of adjoining parcels. For instance, the water requirements for rice are far greater than that of other crops, particularly cotton and cotton pest control is easier if cotton is grown in adjoining fields. Thus, village crop rotation plans are generally drawn up to minimize conflicts. Distinguishing between village rotation plans and government cropping requirements is difficult, both for the individual farmer and the monitoring specialist.

rotation represents an upper limit or a lower limit to cotton production, perhaps it is an upper limit for some farmers and a lower limit for others. Among those who will not plant any cotton (11 producers of LS cotton), five indicated they would grow cotton but were constrained from doing so by the rotation.

### **Production practices**

Farmers who plan to grow cotton in 1993 indicate they will use good production practices (See Table 1.3). However, such reports of good intentions must be anticipated since there has been strong urging to follow these practices by GOE extension staff. Inter-planting of other crops with cotton will be done by about 1/4th of the farmers.<sup>6</sup>

The responses indicated that farmers were more likely to use additional labor to control cotton insects or weeds than to use additional chemicals.

The number of cotton pickings planned for 1993 can be compared to the actual average results for 1992 which was 2.09 times for LS cotton and 2.43 times for ELS cotton (Table 5.1). However, the actual number of pickings may differ from these intentions due to weather or economic factors.

### **Marketing freedom**

Most of the farmers (76 %) expressed the opinion that they expected that cotton marketing will be completely free in 1993 (Table 1.4). Most of the farmers who disagreed with this opinion said that they are unsure what to expect in 1993. No doubt, some of this uncertainty could be eliminated by clear GOE decrees. A total of 24 of the 300 farmers were of the opinion that the government marketing system either contained some bad aspects or they expected that government marketing quotas would be enforced.

In the December survey, 68 percent of the farmers (sample size of 102) said that they felt completely free in regard to making decisions on cotton marketing in 1993. This increase in percentage is statistically significant indicating growing farmer confidence in the governments plans to privatize cotton marketing.

### **Marketing intentions**

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Some cotton experts believe that inter-planting increases cotton yields because the cotton benefits from the extra care given to the onions.

The 288 sample farmers who indicated they would plant cotton in 1993 were asked additional questions about marketing cotton. With no other conditions attached, farmers were asked if they would sell their cotton to the government as they have done in the past. The majority response (56%) was **Don't know** but 39 percent said **Yes** and only 4 percent said **No**. The large **Don't know** response is expected because of the lack of clear price signals provided by the government up to that date, and lack of knowledge about the private sector. But the remaining 127 farmers were very clearly split, 88 percent in favor of marketing with the government, and only 12 percent in favor of the private sector. Of the 112 farmers who said they would sell to the government, 96 gave that response because they said they do not trust the private sector merchants.

Table 1.3. Cotton production practices, 1993,  
second survey of farmers.

Item	Type of cotton		Total
	LS	ELS	sample
	(Percent of sample)*		
<b>Will plant early</b>	97	98	97
<b>Will wait for cut of berseem</b>	5	3	4
<b>Will interplant cotton</b>	25	22	24
<b>Will use more fertilizer:</b>			
Yes	20	32	25
No	1	2	1
Depends on the crop	79	66	74
<b>Will do more manual control of cotton insects:</b>			
Yes	27	35	30
No	7	12	9
Depends on the crop	65	54	60
<b>Will use more chemicals on cotton insects:</b>			
Yes	10	10	10
No	10	7	9
Depends on the crop	79	83	81
<b>Will do more manual weed control</b>	92	96	94
<b>Will use more herbicides</b>	21	18	20
<b>No. of times will pick cotton:</b>	(No. of farmers)		
One time	8	0	5
Two times	79	47	67
Three times	13	53	29
<b>No. of times will pick cotton:</b>	(Percent of cotton)		
One time	5	0	3
Two times	82	31	58
three times	13	69	39
<b>Ave. no times will pick cotton</b>	2.07	2.69	2.37
<b>Other ways to increase cotton income:</b>	(Percent of sample)		
following recommend practices	26	53	36
improve drainage	7	10	8

Source: Field survey in March-April, 1993.

\* Percentages based on 288 farmers who will grow cotton in 1993.

Table 1.4. Cotton marketing plans for 1993,  
second survey of farmers.

Item	Type of cotton		Total
	LS	ELS	sample
<b>Will cotton marketing be completely free in 1993?</b>	(Percent of sample)*		
Yes.	75	78	76
Why said No	(Percent of group)		
Not clear about future	60	44	54
Small farmers get hurt	47	16	35
Some bad parts in Govern. system	14	32	21
Expect govern, quota system	14	12	13
<b>Will you sell to the government?</b>	(Percent of sample)*		
Yes	41	38	39
No	3	5	4
Don't know	56	57	56
Why said Yes.	(Percent of group)		
Will get honest grading	56	43	51
Don't trust private merchant	23	17	20
Will get honest weight	14	17	15
Why said No.	(Percent of group)		
Gov. won't give advance payment	33	100	67
<b>Will you sell to a private dealer?</b>	(Percent of sample)*		
Yes	11	10	10
No	29	29	29
Don't know	61	61	61
Why said Yes	(Percent of group)		
Can get a better price	84	64	77
Can get advance payment	11	36	20
Why said No	(Percent of group)		
Don't trust private merchants	50	45	48
Won't get honest grading	22	21	22
Won't get honest weight	22	12	18
<b>At the same price, who will you sell to?</b>	(Percent of sample)*		
Public sector firm	73	74	73
Private merchant	26	26	26
Why will sell to public sector?	(Percent of group)		
transactions are honest	74	49	64
easy to deal with	20	60	36
Why will sell to private merchant?	(Percent of group)		
easy to deal with	80	59	72
no bureaucracy	15	28	20
transactions are honest	11	17	13

Source: Field survey in March-April, 1993.

\* Percentages based on 288 farmers who will grow cotton in 1993.



When the 288 producers were asked if they would market with a private merchant the majority response (62 %) again was **Don't know** with 29 percent saying **No** and only 10 percent saying **Yes**. Most of those who said they would market with the private merchant said they would do so because they think they would get a better price. Almost all of those who said that they would not market with a private merchant again indicated a lack of trust in the private merchants.

In response to the question; "**Will you sell to whomever will give you the highest price?**" 76 percent gave a **Yes** response, but they were then asked to indicate if they preferred a public or a private firm **provided the cotton price was the same**. To this question the response was 73 percent in favor of the public firm. Of those who preferred the public firm 134 (47 %) did so because they said that transactions with the public firm would be honest. Clearly, the private sector has an image problem. The private merchant must put forth some effort to get a share of the cotton market.<sup>7</sup>

The 288 cotton producers were also asked two questions dealing with cotton gins. Under the proposed liberalization plans farmers could have their seed cotton ginned on a custom basis at a gin and retain ownership of their cotton, or they could sell their seed cotton to a gin. These activities have been illegal in the past. As could be expected, very few farmers indicated they definitely would exercise these options. Actually these options have been discussed very little in the press so farmers could not be expected to have much knowledge of these matters.

In the first survey in December 1992 only 15 percent reported that they knew that they could gin the cotton themselves and only 36 percent knew about selling cotton to a gin.

### **Survey of potential private sector cotton merchants**

A survey was conducted during May-June, 1993 of 101 individuals who were thought to be potential private sector cotton merchants. The sample included some individuals who had been suggested by farmers in the 2nd farmer survey as likely cotton buyers and others selected by MALR employees in the local areas. At the time of the survey no licensing of dealers by the GOE had been initiated so no list of dealers was available, thus, the sample

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However, surveys of private sector fertilizer merchants in 1991 also gave the same results but by the winter of 1992/93 the private sector merchant was named as the preferred source of fertilizer by about one third of the farmers. See Annex IV, Tables 4.5 and 4.6)

list was quite arbitrary. This should be remembered in examining the results.

Table 1.5. Farmers plans to deal with cotton gins in 1993,  
second survey of farmers.

Item	Type of cotton		Total sample
	LS	ELS	
<b>Will you gin your cotton?</b>	(Percent of sample)*		
Yes	0	1	0
No	56	69	61
Don't know	44	30	39
Why said No	(Percent of group)		
don't know how to do this	33	71	50
extra cost	26	13	20
don't know where to go	21	12	17
<b>Will you sell your cotton to a gin?</b>	(Percent of sample)*		
Yes	3	4	3
No	39	46	42
Don't know	58	50	55
Why said No	(Percent of group)		
Have no experience with gins	35	71	50
High transport cost to gin	43	23	35

Source: Field survey in March-April, 1993.

\* Percentages based on 288 farmers who will grow cotton in 1993.

A total of 101 individuals were interviewed in the nine major cotton producing governorates. The sample was drawn roughly in proportion to cotton production in these governorates.<sup>8</sup>

As indicated in Table 1.6, 78 of the 101 respondents indicated that they plan to be cotton traders in 1993.<sup>9</sup> Approximately 2/3rds of these 78 respondents were located in the governorates that produce LS cotton and 1/3rd in governorates producing ELS cotton.

Respondents were asked to give their occupation and to indicate if they owned land but responses to these two questions were

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The questionnaire used in this survey can be found in Annex VII. It had been pretested prior to the conduct of the survey.

The percentage of the sample who indicted a willingness to become cotton traders has no implication since we know very little about the sample selection process.

voluntary. Sixty of the 101 respondents provided data on occupation and 73 volunteered data on land ownership. Of those who reported their occupation, 45 percent were merchants of various agricultural commodities and 38 percent were farmers. Of those who reported on land ownership, 78 percent owned land.

The respondents were questioned regarding their knowledge of the proposed privatization of cotton marketing in 1993. Knowledge of producers freedom to sell to private merchants was universal by all respondents who plan to be cotton traders. Knowledge of other marketing freedoms was much less universal. Only 54 percent of this group knew that producers will have the option to retain ownership of their cotton and have it ginned. This can be compared to the 15 percent of farmers who knew of this freedom in the first farmer survey (See Fig. 1.12 above). But this lack of knowledge of the marketing opportunities would seem to be a serious handicap to merchants.

Table 1.6. Knowledge of privatization and opinion on market freedoms, survey of potential cotton merchants, 1993.

Item	Total Sample	Those who will buy cotton:		
		All areas	ELS areas	LS areas
Sample size	101	78	28	50
<b>Occupation:</b>			(Percent)	
Farmer	38	34	50	24
Merchant	45	47	33	55
All other	17	19	17	21
<b>Do you own land ?</b>	78	81	76	85
<b>Knowledge of cotton marketing freedoms:</b>			(Percent)	
To sell to private dealer	98	100	100	100
To gin own cotton	54	54	54	54
To sell to a gin	64	62	64	60
Opening of Mina El Bassal	89	90	96	86
<b>Will market be free in 1993?</b>				
Yes response (Percent)	49	54	43	60
<b>Remaining obstacles:</b>			(Percent of those reporting obstacles)	
Honesty of merchants	30	33	30	35
Rights of small farmer cannot be protected	25	25	14	30
Farmers must deliver to government to pay debts	23	25	41	13
No experience this year	16	13	12	13

Source: Field survey, May-June, 1993.

The fraction of the respondents who knew about producers rights to sell cotton direct to a gin was little different from the share that knew about ginning cotton. A much higher fraction of the respondents knew the pending opening of the cotton spot

market in Alexandria (Mina El Bassal). A higher percent of the potential traders of ELS cotton knew about the spot market than traders of LS cotton possibly because the ELS areas are in closer proximity to Alexandria.

About over half of the respondents in the sample felt cotton marketing in 1993 would be completely free. Four major obstacles to a free market were cited. About 30 percent of those who feel the market will not be free gave as their reason the questionable honesty of merchants. Surprisingly, some merchants gave this response indicating that some merchants know, or suspect, that they have a bad image with farmers.

The second major obstacle listed dealt with protection for the small farmer. No details were provided on this item but obviously some respondents feel that small farmers will suffer in a free market. In the 2nd farmer survey about 35 percent of the farmers gave a similar response.

Another major perceived obstacle, is that many farmers must sell their crop to the government to pay their debts. The implication is that these farmers are not free to sell their crop as they wish.

About 16 percent of those who plan to be dealers in cotton felt that the lack of experience and knowledge of the system by dealers in 1993 would result in governmental control of the cotton market.

The majority of those who plan to trade cotton will deal in seed cotton and very few have plans to have the cotton ginned or to deal in cotton by-products (Table 1.7).

About half of the potential cotton traders plan to buy cotton on their own account and half will act as agents for others with a few doing both. About 60 percent of those who plan to buy for others plan to buy for private firms.

About one third of those who plan to buy cotton could not report even the type of firm they would sell their cotton to. On the other hand about 1/4 of these traders listed two potential buyers. The major type of buyer these traders plan to sell to are private exporters.

About 2/3rds of those who plan to trade cotton reported no prior experience working with cotton marketing (Table 1.8). This is not surprising since private trade of cotton has been illegal for 30 years. The only experience that they could obtain would be from working for the few public firms.

However a large share of these potential traders come from families who have had experience with cotton. When this was or how helpful this will be to these potential buyers is hard to

evaluate. However, as we saw earlier, many of these respondents are merchants in other commodities.

Table 1.7. Plans for 1993, survey of potential cotton merchants, 1993.

Item	Those who will buy cotton:		
	All areas	ELS areas	LS areas
<b>Your Plans for 1993:</b>		(Number)	
Plan to trade in cotton	78	28	50
<b>Type:</b>			
seed cotton	75	28	47
lint cotton	1	0	1
both	2	0	2
<b>Who will you buy for:</b>			
Buy for yourself	42	16	26
Buy for others	31	11	29
Both	5	1	4
<b>Type company will buy for:</b>			
Private	26	11	15
Public	16	5	11
	(Percent of those trading seed cotton)		
<b>Who will buy your seed cotton?</b>			
Don't know a buyer	32	21	39
List two buyers	23	29	20
private exporter	38	32	41
public exporter	16	29	8
public spinning mill	12	25	4
Co-op	16	14	16
<b>Will you gin the cotton you buy?</b>			
Yes (Number)	4	2	2
Yes (Percent)	5	7	4

Source: Field survey, May-June, 1993.

In the 2nd survey of cotton farmers, some farmers reported that they would sell their cotton to private merchants because they could get advance payments from private merchants but not from the government (See Table 1.4). Thus, we asked these potential private merchants if they would give advance payments to farmers.

Only about 1/4th of these potential cotton traders said that they would make advance payments, 1/2 said they would not make such payments and the remaining 1/4th said they did not know, or had not decided. Thus, many farmers may be disappointed that they may not get advance payments from private dealers. However, there are reasons why merchants do not want to talk openly about this issue. Giving advance payments to farmers obligates the farmer to sell to that merchants, just as was mentioned earlier in regard to debts to the government. Thus, merchants who make

advance payments to farmers are not well respected by some in the community. More accurate information on this item can be obtained by a survey of farmers after the market year is completed.

Table 1.8. Prior experience in dealing in cotton, and planned buying procedures, survey of potential cotton merchants, 1993.

Item	All areas	ELS areas	LS areas
<b>Prior experience:</b> (Percent of sample)			
Worked for a trading company	6	4	8
Worked for an export company	1	0	2
Worked as a cotton grader	10	18	6
Worked as a cotton weigher	17	25	12
Worked in a cotton gin	9	21	2
Graduate of an Ag. Institute	5	4	6
None of the above	67	50	76
Family business	64	68	62
<b>Will you give advance payments?</b>			
Yes	23	32	18
No	49	54	46
Don't know	28	14	36
<b>Will you require minimum quantity of purchase?</b>			
Yes	5	0	8
No	50	61	44
Don't know	45	39	48

Source: Field survey, May-June, 1993.

The average size of cotton farm in Egypt is small. This fact represents a good and a bad feature from the standpoint of the merchant. The small volume may discourage some private merchants from dealing with small farmers. On the other hand the lack of information and opportunity of the small farmer and the lack of structure of the market mechanism may be viewed as an opportunity for profit by other merchants, particularly this first year of privatization.

In an effort to determine if merchants may discourage small farmers from dealing with them, we asked if they as dealers would require a minimum quantity in a transaction. Only 5 percent gave a positive response, 50 percent said NO, and the balance were undecided. This result appears hopeful to the small farmer.

These potential cotton merchants seem very optimistic about the 1993 cotton marketing year both from the standpoint of the farmer and the trader (Table 1.9). A very small fraction (7 %) of these respondents felt cotton prices would decline in 1993, compared to 1992, with a much larger share (35%) expecting prices to increase. But some difference appears to exist between ELS areas

and LS areas. Potential buyers in the ELS areas are some what less optimistic about 1993 cotton prices than those in the LS areas. There may be a sound basis for this difference in that world demand for ELS has declined relative to LS. (But remember the sample size of the ELS group is very small.)

Ninety percent of these potential cotton traders felt that 1993 would be a good year for the cotton producer. The major reason given was optimism about prices and production for 1993.

The enthusiasm of these respondents about 1993 was only slightly less bright for the merchants as 83 percent felt 1993 would also be a good year for them. This optimism is somewhat surprising in view of the fact that this would be the first year for private sector trading in over 30 years and as a result they have no prior years for comparison.

Amazingly, the percentage of respondents who gave a "Don't know" response both about the outlook for the farmer and about the merchant was very low. This indicates general optimism. The major reason cited for this response is that they expect good cotton prices and good production of cotton.

Table 1.9. Expectations of 1993 cotton market season, survey of potential cotton merchants, 1993.

Item	Total Sample	Those who will buy cotton:		
		All areas	ELS areas	LS areas
<b>Expected cotton prices in 1993:</b>		(Percent of sample)		
Same as last season	29	28	47	18
Higher than last season	34	34	14	44
Lower than last season	7	6	18	0
Don't know	30	32	21	38
<b>Will 1993 be good for producers?</b>				
Yes	89	92	96	90
No	8	5	4	6
Don't know	3	3	0	4
<b>Reasons for YES response:</b>				
Expect good prices & good production of cotton	66	67	89	54
Competition	12	13	14	12
Lower returns from other crops	10	12	0	18
Lower pest control costs	5	6	4	8
All other reasons	14	17	0	26
<b>Will 1993 be good for merchants?</b>				
Yes	82	87	86	88
No	15	10	14	8
Don't know	3	3	0	4
<b>Reasons for YES response:</b>				

Expect good prices & good production of cotton	46	45	46	44
Competition	30	37	16	48
All other reasons	26	31	31	32

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Source: Field survey, May-June, 1993.



## Conclusions

- o The laws and decrees necessary to 1) legalize the private sector domestic trading of cotton, purchase and sale of cotton by gins, 2) the operation of the cotton spot market, and 3) the formation of a Cotton Exporters Union have been drafted, they have been approved by the State Council and have been presented to the People's Assembly for approval. As of March 31, 1994, these laws have not been approved by the People's Assembly. Thus, privatization did not occur during the 1993/94 cotton marketing year. **However, it is expected that this approval will occur in sufficient time to allow private sector participation in both the domestic and export markets in the 1994/95 cotton marketing year.** Both producers and merchants expect that privatization will occur in 1994/95.
- o A preliminary liberalization and privatization plan for the ginning sector was prepared by the Cotton Trade and International Company. This plan will allow the private sector open access to ginning facilities in the 1994/95 cotton marketing season.
- o Surveys indicate that most farmers felt completely free in regard to production decisions during 1993 but some producers felt restrained by the crop rotation. Some of this feeling of constraint results from technical or social constraints to comply with the cropping plans of neighbors.
- o Surveys in early 1993 indicated that the majority of farmers expected to see private sector marketing of cotton and the reopening of the cotton spot market in 1993. A similar survey in March 1994 also indicated farmers belief that cotton marketing would be privatized in 1994.
- o Surveys of farmers in early 1993 indicated an expectation of cotton prices equal to or higher than prices received in 1992. Floor prices for cotton for 1993 were not clearly announced but frequent GOE news releases suggested that cotton prices for 1993 would be the same or higher than in 1992. After no action was taken on privatization of cotton marketing in the 1993 season, cotton procurement prices for cotton trade companies were first announced on Sept. 7 1993 and later modified for ELS varieties on October 10, 1993.
- o Floor prices for the 1994/95 season were announced by press releases prior to the 1994 cotton planting season.

## BENCHMARK NO. 2

### LIBERALIZATION OF THE MARKETING OF RICE

#### Introduction

The GOE has recently eliminated mandatory delivery quotas for rice and has repealed laws that prohibited the intergovernmental transport, storage, milling, or trade of rice. Exports of rice by private traders was permitted in 1991/92. The bulk of the rice milling capacity is in the hands of the public mills.

**Benchmark:** "The quota for mandatory delivery of rice to the government was eliminated ahead of schedule. All remaining GOE prohibitions and restrictions on possession, milling, transport, marketing and export of rice by the private sector will be eliminated. Private sector rice exporters will be free to export rice at prices set according to market forces. The rice export committee will carry out regulatory and quality control functions without restricting, by any means, the exportation of rice by the private sector."

#### DECREES and OFFICIAL ANNOUNCEMENTS

No decrees were issued regarding the 1992 rice crop with the result that no governmental restrictions were imposed on rice trading in 1992.

#### Privatization of rice mills

Presidential Decree No. 203 of the year 1991 transferred the public sector rice mills from the Ministry of Supply to the Holding Company for Rice Milling and Marketing. This holding company is in the Public Enterprise Sector which operates as a private sector company in terms of profit maximization but ownership is still largely held by the GOE.<sup>10</sup> These holding companies are intended to be a first stage towards privatization.

The Holding Company for Rice is studying various avenues to pursue in terms of privatization, including the sale of mills, leasing of mills, milling rice on a custom basis for the private sector, and sale of shares in public sector companies. Five small, older, rice mills (50-70 tons/day capacity) have been taken out of operation and have been offered for sale to the

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All mills labeled as public mills in this report are in the Public Enterprise Sector.

private sector. Additional steps toward privatization are planned for the 1993 rice marketing year.

One of the major obstacles to privatization is the redundancy of employees. The Holding Company for Rice is exploring the possibility of giving shares in the milling companies to employees in lieu of cash incentive payments and/or as incentives for early retirement. The MALR indicates that privatization of the rice sector is expected to be completed in two more years.

### **Rice Exports**

Decree No. 458 of the year 1993 (Figure 11.1, Annex XI) of the Minister of Economy and Foreign Trade announced several important decisions regarding exports of agricultural products that will result in freeing these markets. This decree established that export prices set by the rice export committee is to be considered as "guiding prices" only, and also all that agricultural commodities are to be exported without export licenses. Thus, this decree eliminated a restriction on the exportation of paddy rice which now allows exporters to export either paddy or milled rice, at any prices they choose, and without license. This was an important action toward liberalization of rice export markets.

The following article was published in the Al Ahram newspaper on 12-2-1993:

"Dr. Atef Ebeid, Minister of Public Enterprise and Administrative Development, declared that it had been decided to stop the exportation of paddy rice as soon as the exportation contracts are fulfilled for reasons of market stability. He also stated that it was decided that the mills will have to execute all existing exportation contracts and they will procure rice from farmers at LE 380 instead of LE 365/ton."

This announcement appears to contradict the intentions of Decree 458 of the year 1993 and would also violate the Benchmarks regarding trade of rice. However, this policy was apparantly cancelled by another announcement on 12-6-1993 in the Al Ahram (Figure 11.5) which included the following:

"Prime Minister, Dr. Atef Sidki .... also stated that up till now no decree has been issued to ban the paddy rice exportation, currently, there is a shortage in the supply of rice due to the traders' hedging and storing the rice deliberately. The Prime Minister confirmed that the government will go full-heartedly with the liberalization without any reluctance."

This announcement by the Prime minister reaffirms the policy put forth in Decree 458 to free the export trade in rice and other agricultural commodities.

## SURVEY RESULTS

### Producers

A survey of 200 rice producers in the four major rice producing governorates provided no evidence of interference of any type by the government in rice marketing activities by producers (See Annex II)<sup>11</sup>. **The only complaints registered, and this only by 5 farmers, was that the public mills refused to purchase Filipino type rice.**

### Millers

A survey was conducted of 122 public and private sector rice millers. All operators of the public and private mills interviewed indicated that they were aware of the changes in the laws governing rice mills that were made in 1991. **None of the private mill operators reported any government restrictions on rice milling.** One public mill operator complained of GOE restrictions on mills but the GOE restrictions mentioned are normal rules of operation of public firms for safety and security and do not interfere with the rice trade.

Few of the small private sector millers (those with milling capacities of less than 100 tons/month) either buy, sell, store or transport rice. Commercial private millers, (those milling more than 100 tons/month) are more inclined to buy, sell, store and transport rice but still on a small scale. Only 30 percent of the commercial mills bought paddy rice, four percent sold paddy rice with the remainder of the paddy rice milled and sold as white rice. About one fourth of these mills have some rice storage capacity but the average amount of rice stored is very small (55 tons/firm) and, thus, represents a small factor in the total rice trade.

A full scale commercial private sector rice milling and marketing industry has yet to develop in Egypt. Past GOE constraints on rice marketing kept this from developing but the future will likely see the development of a few large scale privately operated rice mills, possibly through the privatization of public mills, along with a few rice marketing companies using commercial brands at the retail level and the subsequent disappearance of many of the small private mills and the marketing of non-brand milled rice.

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Results of surveys of producers, millers, merchants and exporters are provided in Annex II. English translations of the questionnaires, and the response codes are available in Annex IX. Data files resulting from these surveys are listed in Annex X.

## Merchants

In a survey of 200 rice merchants in both the rice producing and non-rice producing governorates, **no complaints were received on government interference in the domestic rice trade.** Domestic rice merchandising currently consists of a very large number of very small firms with many sales between firms to establish price and spatial utility. The large number of merchants coincides with the large number of small inefficient village mills. An extreme amount of consolidation of domestic rice marketing and milling firms will likely occur in the future.

Data obtained from surveys of millers and merchants confirm a definite consumer preference for Japonica type rice, at least in the rice producing areas of Egypt.

## Exporters

Four public sector and four private sector rice exporters were interviewed to determine if any GOE restrictions on rice export still exist. All eight firms responded that, in their opinion, **permitting the private sector to engage in the rice export trade was beneficial.** The reasons given included: to free prices, to open new markets for exportation, and to provide hard currency for the country.

However, four of the eight firms that were interviewed (three public and one private) reported current government restrictions on export trade. Their common complaint was that the rice export contracts awards committee (Rice Board) must approve export contracts and that contract prices must be approved by the Rice Board.

However, personal follow-up interviews with members of the Rice Board and several of those respondents who had voiced this complaint put a different interpretation on these responses. The Rice Board consists of members from several Ministries of the GOE, from staff of the Holding Company for Rice, and from both public and private export companies. The Rice Board sets target export quantities, target export prices and also issues the export licenses for rice. The Rice Board sets prices on all grades of export rice in US dollars. Prior to Decree 458/1993, all exporters, public or private, had to export rice at these prices and must exchange the US dollars at the Central Bank of Egypt for Egyptian pounds.

But it is recognized by all parties that refunds can and are made by exporters to buyers either in foreign or local currency. The freedom to exchange currency at the free market rate has given the exporter the opportunity to make contracts with buyers in foreign countries as he likes. **Essentially, the Rice Board lost control of rice exports with the advent of free exchange rates.** In the words of one party, the Rice Board is now a

"statistical bureau" which provides data on exports but it does not have the power to stop any exporter from making any type of contract he wishes. The Rice Board may in fact cause a slight increase in administrative costs and effort for exporters by its regulations but it cannot otherwise interfere with exports.

In the 1992/93 export year, new foreign competitors entered the Middle East and Mediterranean markets which has been the major traditional Egyptian rice marketing area. This has resulted in problems to all exporters, both public and private, who must buy milled rice from the holding company and still compete at reduced prices. As a result, profits from exports are very low and rice exports in 1992/93 will likely decline.

No evidence exists that the Rice Board has discriminated against private export merchants. Currently, the private exporter actually has more freedom in making trade arrangements than does the public exporter since the private exporter can enter into barter arrangements as he wishes and can accept any currency he wishes. Partly as a result of this freedom, the private sector has captured 50 percent of the rice export market in 1992/93 as compared to about 10 percent in 1991/92 (see Annex II).

Also, two private sector firms reported in the survey that they were required to purchase rice from the holding company mills. But follow-up interviews revealed that **private export firms are not required by law to purchase milled rice from holding sector mills but it was revealed that private mills cannot currently furnish the quality of milled rice needed to meet export specifications and hence public mills must be called upon to produce the quality needed for export.**

## Conclusions:

- o No evidence was found of any GOE restraints on free domestic trade of rice among producers, merchants or millers.
- o The rice export committee has attempted to guide rice exports through target prices and quantities but no evidence was found that this committee has interfered with exports of milled rice. The private sector has increased its share of the export market of milled rice from 10 percent in its first year of operation, 1991/92, to 50 percent in its second year of operation, 1992/93.
- o Decree 458/1993 of the Minister of Economy and Foreign Trade clearly specifies that export prices on agricultural commodities are "guiding" prices only and that rice exporters can export either paddy or milled rice, and without the need of an export license. The policy of free trade in rice was reaffirmed by an announcement by the Prime Minister on 12/6/1993.
- o Privatization of public sector rice mills has been initiated and additional steps are planned for the 1993 rice marketing year including the sale, leasing, or custom operation of the mills. **These actions represent policy reforms that were not required in the Benchmarks for Tranche VI but contribute toward meeting the longer-run goals of the APCP policy reform program**



## BENCHMARK NO. 3

### FERTILIZER PRICES

#### Introduction

Ex-factory fertilizer prices for the same type of fertilizer have, until recently, differed between factories since factories were allowed to set prices based on individual production costs. Retail prices charged by PBDAC were set by GOE Ministerial decree. The difference between ex-factory prices and retail prices charged by PBDAC, plus marketing costs, was made up by subsidies to PBDAC. The movement from fixed prices to free market prices has proceeded gradually with retail prices being gradually increased and GOE subsidies gradually reduced.

**Benchmark:** "By the end of CY 1992, the retail prices of fertilizer handled by public sector distributors will be adjusted to reflect:

- revision of ex-factory prices so that the price of each type of fertilizer is within 12 percent of the international, or border prices, with adjustments for quality. PBDAC will purchase fertilizer from local factories at competitive prices and terms with private dealers and cooperatives;
- elimination of all subsidies on newly purchased fertilizer as of July 1, 1992 (with the possible exception of potassium sulfate); and
- adjustment of marketing margins and commissions between factory and retail points of sale to a full commercial basis."

#### INTERNATIONAL FERTILIZER PRICES AND FERTILIZER IMPORTS

Data on international fertilizer prices (Tables 3.1 and 3.2) serve as a background for the comparison of ex-factory and border prices required in this Benchmark. This Benchmark requires that this comparison be made at the end of CY 1992. This comparison will be made but the data on international prices indicates some difficulties with this comparison.

The data indicate large variability in the prices of some types of fertilizer and little variability in others. Those types

demonstrating little price variability were AS and SOP.<sup>12</sup> TSP priced at Morocco also demonstrated little variability but with a downward trend over time with prices in August 1993 at a low point over the past 2 1/2 years.

Prices of urea, ammonia, and DAP have been quite variable and also have been declining. These data indicate that at the end of CY 1992 most fertilizer prices were on a downward trend that continued until August 1993. Urea prices in Eastern Europe in August 1993 were only 55 percent of prices in early 1991.

The existence of such trends and variability in prices indicates a need to make such price comparisons in a different manner. **Such price comparisons should either be based on average prices over an extended period, such as a year, or comparisons should be made several times during the year.**

The rationale for comparing ex-factory prices with border prices rests on the concept of an open free international market with freedom of buyers and sellers and is based on the concept that under perfect competition such prices will, in the long-run, reflect full costs of production with all inputs priced at their international trade value.<sup>13</sup> In the short run, such prices may depart from this long-run average cost for several reasons, such as imbalances between supply and demand and the willingness of some sellers to temporarily accept prices that cover only variable production costs for a variety of reasons.

The international price data indicate substantial differences in prices at different locations. Most, but not all of these price differences are due to freight and other shipping costs. Some differences are due to quality differences.

In the current market the Commonwealth of Independent States(CIS) have been accused of practicing "dumping". Actually the CIS are probably not exporting excess supplies but are in need of foreign exchange. If all or most of the inputs in their manufacture of fertilizer are purchased with local currencies and the product is

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The following abbreviations are used in this report:  
ammonium nitrate-AN, ammonium sulfate-AS, calcium nitrate-CN,  
single super phosphate-SSP), concentrate super phosphate-CSP,  
potassium sulfate-KS, Triple super  
phosphate-TSP, (G=Granulated), sulfate of potash-SOP, muriate of  
potash-MOP.

See section 6.4.1 of "EGYPT FERTILIZER POLICY IMPACT STUDY"  
by International Fertilizer Development Center, Muscle Shoals ,  
Alabama, USA, June 1993.

sold on the international market, this becomes a method of converting local currency into foreign exchange.

Between January and August 1993 the MALR Purchase Committee for Importing Fertilizer approved the importation of approximately 15,000 MT of urea from Libya, some under barter arrangements for Egyptian agricultural products and some at prices ranging from US\$ 80 to 119/MT. The committee also approved the import of about 60,000 MT of AS from CIS at prices ranging from US\$ 52-56/MT. (These imports were approved but approval does not mean that the imports were made and information is not available on actual imports.)

Table 3.1. International spot prices of nitrogen fertilizers.

Year & Month	Urea(bagged) 1/		AS(bagged) 2/			Bulk Ammonia	
	ME	EE	EE	WE	USG	ME	NWE
<b>1991</b>	(US Dollars per Metric Ton)						
Feb.	180-185	157-160	30-35	40-50	35-40	NA	125-130
March	NA	NA	NA	NA	NA	NA	NA
April	165-170	150-155	40-45	40-50	35-40	110-125	125-130
May	158-163	145-150	40-45	40-50	35-40	100-115	110-120
June	158-163	135-140	40-45	40-50	35-40	100-115	110-120
July	158-163	135-140	40-45	40-50	35-40	100-115	110-120
Aug.	160-162	143-145	40-45	40-50	35-40	100-115	110-120
Sept.	157-163	148-150	40-45	40-50	35-40	105-115	120-125
Oct.	150-155	130-135	40-45	40-50	35-40	115-120	125-130
Nov.	150-155	125-133	40-45	40-50	35-40	110-115	115-120
Dec.	150-155	128-133	40-45	45-50	35-40	110-115	110-115
<b>1992</b>							
Jan.	150-155	126-130	40-45	45-50	35-40	95-100	100-105
Feb.	142-144	118-123	40-45	45-50	35-40	90-95	100-105
March	142-144	120-125	40-45	45-50	35-40	70-80	90-100
April	142-144	125-130	50-55	55-60	40-45	70-80	90-100
May	150-155	125-130	50-55	55-60	40-45	78-83	90-100
June	155-160	127-132	50-55	55-60	40-45	70-80	90-95
July	155-160	127-132	47-50	55-60	40-45	70-80	90-95
Aug.	155-160	127-132	47-50	55-60	40-45	70-80	90-95
Sept.	140-150	115-120	47-50	55-60	40-45	70-80	90-95
Oct.	135-138	110-115	47-50	55-60	40-45	95-105	100-105
Nov.	125-130	110-115	47-50	55-60	40-45	110-115	120-125
Dec.	124-130	105-110	47-50	55-60	40-45	115-120	123-127
<b>1993</b>							
Jan.	124-130	100-105	47-50	55-60	40-45	115-120	123-127
Feb.	124-130	93-98	40-45	55-60	40-45	120-125	123-127
March	115-120	80-90	40-45	55-60	40-45	85-100	110-115
April	105-110	80-85	40-45	55-60	40-45	65-75	100-105
May	110-115	80-85	40-45	55-60	40-45	65-75	100-105
June	110-115	85-90	40-45	55-60	40-45	70-75	100-105
July	110-115	85-90	40-45	55-60	50-60	77-82	100-105
Aug.	110-115	85-90	50-55	55-60	50-60	77-82	100-105

Source: FMB International Price Guide. All prices FOB and exclude Egyptian import tariffs or sales tax. Quoted prices usually for last week of the month. NA = Not available, ME = Middle East, EE = Eastern Europe(Black Sea), WE = Western Europe, USG = United States gulf, NWE = North West Europe.

1/ Urea bagged price US\$ 10-13 above bulk.

2/ AS bagged price US\$ 13-15 above bulk. USG price is bulk.

Table 3.2. International spot prices of phosphate and potassium fertilizers(FOB, bulk).

Year & Month	USG	DAP 1/ Morocco	TSP 2/ Morocco	USG	MOP 3/ Israel	SOP 3/ USG
<b>1991</b>	(US Dollars per Metric Ton)					
Feb.	183-185	203-208	157-158	98-103	95-110	190-195
March	NA	NA	NA	NA	NA	NA
April	176-178	205-206	160-162	102-107	95-110	192-195
May	172-173	200-205	146-147	104-107	105-110	192-195
June	182-184	195-200	140-142	102-108	105-110	192-195
July	178-181	195-200	140-142	102-108	105-110	192-195
Aug.	166-168	195-200	140-142	102-108	105-110	192-195
Sept.	168-170	186-188	140-142	97-106	105-110	192-195
Oct.	151-155	185-187	140-142	100-107	105-110	191-195
Nov.	153-155	172-175	140-142	97-106	95-110	191-195
Dec.	158-160	176-180	140-142	97-106	95-110	191-195
<b>1992</b>						
Jan.	163-166	183-185	140-142	97-105	95-110	191-195
Feb.	159-161	160-188	132-140	97-105	95-110	191-195
March	150-152	172-175	132-140	97-105	95-110	191-195
April	150-153	170-175	138-140	102-110	95-110	191-195
May	148-150	170-175	140-142	104-110	95-110	191-195
June	139-143	165-170	140-142	104-110	100-110	191-195
July	136-139	154-160	138-140	100-110	100-110	191-195
Aug.	136-138	153-155	138-140	100-110	100-110	191-195
Sept.	134-135	155-158	138-140	100-110	100-110	191-195
Oct.	135-137	155-158	135-140	100-110	100-110	191-195
Nov.	133-137	158-162	135-140	96-110	100-110	191-195
Dec.	134-138	155-162	135-140	96-110	100-110	191-195
<b>1993</b>						
Jan.	127-129	150-155	135-140	88-105	100-110	191-195
Feb.	118-121	140-150	135-140	88-105	100-110	191-195
March	110-112	125-145	125-130	88-105	95-102	191-195
April	115-120	125-135	120-130	84-105	85-100	192-195
May	122-124	125-135	117-240	84-105	85-100	192-195
June	117-121	120-135	110-112	84-105	85-100	192-195
July	122-124	125-135	105-108	70-106	85-100	192-195
Aug.	123-127	125-135	105-108	70-106	85-100	192-195

Source: FMB International Price Guide.

All prices FOB and exclude Egyptian import tariffs or sales tax. Prices usually for last week of the month. NA = Not available,

DAP = Diammonium phosphate, TSP = Triple super phosphate

MOP = Murate of potash, SOP = Sulfate of potash

USG = United States gulf,

1/ Morocco bagged price usually \$20 over bulk.

2/ Morocco bagged price usually \$15 over bulk.

3/ Potash prices are for powder, price premiums of \$6-8 for granulated MOP and \$20 premium for granulated SOP.

Such sales by Libya or CIS can be regarded as "distress" sales. It **should not** be expected that Egyptian domestic ex-factory prices should be compared to such prices. These prices are most likely below long run average costs of production or reflect some type of exporter's subsidy. In fact, **an import tariff designed to protect domestic producers against such types of sales could be justified.**

#### EX-FACTORY FERTILIZER PRICES VERSUS BORDER PRICES

Table 3.3 reports the ex-factory prices for domestically produced fertilizers announced on January, 1993.<sup>14</sup> These data illustrate the variation in fertilizer prices in Egypt between factories and by type of fertilizer. In addition, during 1992/93 fertilizer factories have offered seasonal and volume discounts to some buyers (See footnote 5 this chapter). Such variations would complicate the problem of making comparisons with border prices but were ignored in this analysis due to lack of data on these arrangements.

Table 3.3. Domestic ex-factory prices.

Type of fertilizer and Factory	FY 1991/92	January 1993
<b>Urea</b>	(LE/Ton) 1/	
Abu Qir	420.00	450.00
NASR-Talkha	400.00	450.00
<b>AN 2/</b>		
Abu Qir	380.00	395.00
NASR-Talkha	263.00	345.00
KOK	338.60	338.60
Qena	298.20	338.60
<b>AS</b>		
NASR	295.00	316.00
KOK	264.60	281.00
<b>CN</b>		
NASR	194.25	205.00
<b>SSP</b>		
Kafr El Zaiat	183.75	182.00
Abu Zaabal	175.00	182.00
<b>CSP</b>		
Abu Zaabal	360.00	416.00

1/ Prices do not include 5 % sales tax or 2% commercial tax.

However, one should note that such discounts would result in lower average ex-factory prices and, thus, lower ratios of ex-factory prices to border prices than are presented here.

This presentation relies heavily on a recently completed examination of border pricing reported in Sections 6.4.1 to 6.4.3 of the IFDC report cited in footnote 1.

Other complications include differences in quality of fertilizer between domestic factories and between domestic factories and fertilizer in world trade.

The analysis contained in the IFDC report deals with many of the quality and nutrient difficulties and, thus, will be heavily relied upon here. Table 3.4 presents a comparison of ex-factory prices with border price equivalents for the 6 types of fertilizer produced in Egypt.<sup>15</sup>

Table 3.4. Calculation of fertilizer border equivalent prices, January, 1993.

Product	Urea Abu Qir (bulk)	Urea Talkha (bulk)	AN Abu Qir	AN Talkha	CN Est.	AS Import	GTSP Import	SSP Est.
World trade								
Prices 1/	130	133	116	116	---	52.4	180	---
Border								
Price	433	443	386	386	326	175	599	599
Loading	-8	-8	-10	-10	---	9	2	2
Trans.	-8	-12	-8	-8	---	---	---	---
Bagging	20	20	-2	-2	---	26	---	---
Nutr, Adj.	---	---	---	---	-169	---	-111	-406
Sub total	437	443	366	366	---	209	491	196
Loss (0.5%)	2	2	---	---	---	1	2	1
Qual. Adj.	---	---	---	-40	---	40	-49	-20
BP Equiv.	439	445	366	326	157	250	444	177
Ex-Fact.	450	450	395	345	205	310	416	182
Ratio 3/	102.5	101.2	107.9	105.8	130.7	124.0	94.5	102.8

1/ Nitrogen prices are based on Middle East, Jan. 1993 and all phosphorus prices are average cost, ins., and freight, 1992/93.

2/ Exchange rate of LE 3.33/US\$.

3/ Ex-factory price divided by border price.

In Table 3.4 costs of loading and transport are subtracted for urea and AN since these border prices are FOB export prices. Additions for loading (unloading) are made for AS and phosphates

See Table 6.4.1 of the IFDC report. However this table contained two incorrect ex-factory prices. AS was LE 316/ton and CSP was LE 416/ton as shown in Table 3.1. Also, the estimate for CN should be based on the adjusted price of LE 326/ton for AN. These corrections were confirmed by private correspondence with I. Gregory, IFDC.

since these are import prices. The cost of bagging is added to urea and AN since these export prices are for bulk fertilizers.

Quality adjustments of 10 percent were made for AN produced by the Talkha factory and for locally produced phosphatic fertilizer to make them comparable to world trade quality. The comparison for AS is based on imports from East Europe countries which are below domestic quality requiring a positive adjustment.

CN and SSP are not traded (See Tables 3.1 and 3.2) and hence price comparisons are based on nutritive values. The estimate for CN is based on the value of AN at Talkha after quality adjustment. The nutrient adjustment compares AN at 33.5 % nitrogen and CN at 15.5 %. The SSP estimate is based on GTSP with a nutrient adjustment for GTSP at 46 %, SSP at 15 %, and locally produced CSP at 37 %.

The results show a small variance between ex-factory prices and border prices for the major nitrogen fertilizers and phosphates and major variance only for the two minor nitrogen fertilizers, AS and CN. Also note that the greatest variance, for CN, was based on calculations including nutrient and quality adjustments which must be regarded as tentative. As indicated earlier, AS was being imported in 1993 by both PBDAC and the private sector at the price quoted in Table 3.4. Imports by PBDAC were requested by the MALR since domestic production of AS is insufficient to meet the needs of rice, fruit and vegetable producers.

The ex-factory/border price comparisons in Table 3.4 were performed assuming imports without customs duties. The ex-factory prices of these two types of fertilizer are about equal to the border prices plus the 30 percent import customs duties that applied at that date.<sup>16</sup>

On the basis of recent factory output, (see Table 6.8) urea provides 45 % of the nitrogen in Egypt, AN provides 52 %, AS provides 1 % and CN provides 2 %. Thus, the weighted average ratio of ex-factory to border prices is 105 for nitrogen and 102 for phosphates. Also note that volume and seasonal discounts offered by factories during 1992-93 would further reduce these ratios. Such discounts exist primarily on urea and AN and would, in total, reduce the ratio between ex-factory and border prices by no more than 1-2 percentage points.

### **FERTILIZER SUBSIDIES**

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A new schedule of the import duties applying to fertilizers were announced in early 1994. See portions of Presidential Decree No. 38 for 1994 included in Figure 10.1



The latest Amendment to the MOU on policy reform calls for the elimination of all subsidies on newly purchased fertilizer as of July 1, 1992 with the possible exception of potassium sulfate. GOE subsidization of fertilizer imports through a favorable exchange rate was discontinued in July 1991. Beginning in July, 1992 factories were required to sell fertilizer at the same price to all buyers, public and private, including a 5 % sales tax and 2 % commercial tax.<sup>17</sup> Also, beginning with FY 92-93 GOE budget subsidies to PBDAC were discontinued for all domestically produced fertilizers. GOE budget subsidies to PBDAC were continued in FY 92-93 only on potassium sulfate (KS).

During negotiations on amendment #2 of the MOU the GOE requested a continuation of subsidies for KS because of the drastic difference between the current import cost of this type of fertilizer and domestic retail prices, and because of the need to expand the use of this type of fertilizer to meet plant needs.

For example, PBDAC's retail price of KS was LE 57/ton in FY 89/90 and LE 305/ton in FY 90/91. In July 1991 PBDAC's subsidized price of KS had been increased to LE 369/ton to reduce subsidy costs but the full import cost of this type of fertilizer to PBDAC was LE 922/ton. This implies a substantial subsidy per ton but the impact of these price increases was a drop in sales during FY 1991/92 as shown in Table 3.5.

Table 3.5. Imports and sales of potassium sulfate by PBDAC.

Fiscal year	Imports	Sales
	Metric Tons	
1986/87	NA	60,181
1987/88	NA	61,442
1988/89	80,000	56,322
1989/90	15,000	44,143
1990/91	128,000	57,740
1991/92	16,000	43,837
1992/93	80,000 1/	53,275

Source:PBDAC NA= Data not available.  
1/ Planned.

With the following exceptions: a) "seasonal" discounts were given during late 1992, b) quantity discounts of 2 percent were given to distributors who purchased minimum amounts per month, and c) co-operatives were not required to pay the 2 percent commercial tax.

The January 1993 costs of importing KS were estimated at LE 920/ton bagged, ex-Alexandria.<sup>18</sup> The January 1993 PBDAC retail price of KS was LE 380/ton plus 5 percent sales tax or LE 399, thus, requiring a subsidy of LE 540/ton plus transport and handling costs or about LE 570 ton.

The subsidy received (or to be received) by PBDAC from the Ministry of Finance for FY 91/92 operations is LE 76 M. which can be compared with subsidies received in FY 89/90 of LE 176 M. and LE 194 M. in FY 90/91. The GOE subsidy budgeted for PBDAC for fertilizer for FY 92/93 is LE 33 M. This was intended to be used exclusively as a price subsidy on KS. With reported sales of 53,275 tons the budget subsidy on KS for FY 1992/93 is estimated at LE 30 M.

The above discussion does not deal with any aspects of subsidization of fertilizer production or transportation through existing subsidies on energy within the economy. These aspects are not dealt with here because the Benchmarks in the MOU do not deal with these types of subsidies.

#### **MARKET FERTILIZER PRICES and MARKETING MARGINS**

Tables 3.6-3.10 summarize survey data on fertilizer prices (see Annexes III and IV). Table 3.6 presents data on prices and margins as reported by distributors and merchants on their sales direct to farmers. The data indicate that prices paid by merchants and distributors and retail prices increased by about 3 percent between the two seasons which resulted from increases in ex-factory prices since July, 1992 (see Table 3.10).

Prices paid by merchants were generally higher than prices paid by distributors since distributors made most of their purchases from factories while merchants were buying mainly from distributors. Also, prices paid by merchants to factories were higher than those paid by distributors because they were purchasing smaller volumes.

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See Table 6.3.1 of the IFDC report cited in footnote 1.

Table 3.6. Prices of fertilizer sold to farmers reported by merchants and distributors, total sample.

Type of Fertilizer	Purchase Price	Sales Price	Margin	
	(LE/ton)	(LE/ton)	(LE/ton)	(Percent)
<b><u>Summer season, 1992.</u></b>				
<b>Sales by Distributors</b>				
Urea	444.47	462.85	18.38	4.1
AN	360.72	385.51	24.79	6.9
SSP	184.21	196.29	12.08	6.6
Average	---	---	18.40	5.0
<b>Sales by merchants</b>				
Urea	456.15	471.02	14.88	3.2
AN	377.25	390.12	12.87	3.4
SSP	188.21	199.13	10.92	5.8
Average	---	---	13.34	3.6
<b><u>Winter season, 1992-93.</u></b>				
<b>Sales by Distributors</b>				
Urea	452.94	475.88	22.94	5.1
AN	409.54	423.05	13.51	3.3
SSP	186.11	204.44	18.33	9.8
Average	---	---	17.90	6.2
<b>Sales by merchants</b>				
Urea	468.70	484.78	16.91	3.6
AN	390.55	403.33	12.78	3.3
SSP	193.33	203.43	10.10	5.2
Average	---	---	13.32	3.6

Source: Field surveys, Oct.-Nov. 1992, and Jan.-Feb. 1993.

Survey results from the 1992/93 winter season (Annex IV) indicate that most distributors received volume discounts because they had agreed to accept delivery of a minimum tonnage/month. These volume discounts should not be considered as violations of the requirement for equal ex-factory prices for all buyers. Seasonal discounts are in reality payments for storage.<sup>19</sup>

Retail prices reported by merchants were generally higher than retail prices (to farmers) reported by distributors. Distributors were, thus, passing some portion of the lower price on to the farmer. Perhaps this difference may be the result of differences in volumes but data on size of individual sales to farmers were not obtained to allow any analysis.

See Section 15.2 of the IFDC report for recommendations regarding seasonal discounts and storage.

Private merchants usually charge a higher price for fertilizer than does the public sector. A comparison of the seasonal differences in prices for the whole country is given in Table 3.7 where we see that the difference in prices between the public and private sectors decreased dramatically between the two seasons.

Table 3.7. Fertilizer prices paid by farmers by type of fertilizer, entire country of Egypt, 1992-1993.

Type of Fertilizer	Purchases from:		Difference
	Public sector	Private sector	
<b>Summer season, 1992.</b>		(LE/TON)	
Urea	464.40	483.40	19.00
AN	392.80	411.60	18.80
SSP	198.60	206.40	7.80
<b>Winter season, 1992-93.</b>			
Urea	476.80	486.00	9.20
AN	411.00	415.00	4.00
SSP	204.00	205.40	1.40

Source: Field surveys, Oct.-Nov. 1992, and Jan.-Feb. 1993.

These comparisons are also given by region in Table 3.8. In the case of urea, the average price differential between private sector and public sector prices for the entire country was 4.1 percent in the summer of 1992 but only 1.9 percent in the winter 1992-93. For AN the differential was 4.8 percent and 1.0 percent respectively and for SSP the difference was 3.9 and 0.7 percent. This decline in price differential is likely related to increased competition and the increased market share held by the private sector in the winter 1992-93 season compared to the 1992 summer season (See Chapter 6).

The data in Table 3.8 show that the difference between private sector prices and the public sector prices were greatest in Middle Egypt and the least in Lower Egypt in both the summer and winter seasons. In the winter survey this average differential had dropped to about 1 percent in Upper Egypt, 2.5 percent in Middle Egypt and was only 1.2 percent in Lower Egypt. This regional difference is presumably the result of less competition in Middle Egypt than in the other parts of the country.

Table 3.9 presents a comparison of prices paid by merchants by region. Regional patterns differed by type of fertilizer and by season. In the summer season the prices of urea were highest in Upper Egypt and lowest in Lower Egypt. Prices of AN and SSP were highest in Middle Egypt and lowest in Upper Egypt. By the winter season the highest urea prices were reported in Middle Egypt but Lower Egypt still reported the lowest prices of urea. Prices of AN were still highest in Middle Egypt and lowest in Upper Egypt while prices of SSP had risen considerably in Upper Egypt with little change in the other regions.

Table 3.8. Fertilizer prices paid by farmers, private sector versus public sector.

Type of fertilizer	Upper Egypt	Region Middle Egypt	Lower Egypt	Total Sample
<b>Summer season, 1992.</b> (LE/50 KG above public sector price)				
Urea	1.73	1.19	.86	.95
AN	1.39	2.01	.06	.94
SSP	-.05	1.54	.23	.39
(percent above public sector price)				
Urea	7.5	4.9	3.8	4.1
AN	7.2	10.3	0.3	4.8
SSP	-0.5	16.2	2.2	3.9
Average	6.4	8.4	2.1	4.2
<b>Winter season, 1992-93.</b> (LE/50 KG above public sector price)				
Urea	-.18	1.22	.10	.46
AN	.91	-.31	.44	.20
SSP	.06	.25	-.04	.07
(percent above public sector price)				
Urea	-1.0	5.2	1.9	1.9
AN	4.4	-1.5	2.2	1.0
SSP	0.6	2.5	-0.4	0.7
Average	1.0	2.5	1.2	1.5

Source: Field surveys, Oct.- Nov. 1992, and Jan.- Feb. 1993.

Table 3.9. Comparison of purchase prices paid by merchants by region, all sources, three major types of fertilizer.

Type of Fertilizer	Upper Egypt	Middle Egypt	Lower Egypt
<b>Summer Season 1992</b>		(LE/Ton)	
Urea	460.99	457.19	447.35
AN	373.33	381.48	378.77
SSP	186.00	190.16	188.16
<b>Winter Season 1992-93</b>			
Urea	461.63	476.49	457.78
AN	382.99	397.62	383.31
SSP	198.69	189.37	189.81

Source: Field surveys, Oct.- Nov., 1992 and Feb.- March, 1993.

Regional differences in prices result from differences in transport costs and competition. However, the lack of a consistent pattern of price differentials also may reflect the need for a larger sample.

Table 3.10 summarizes the survey data on fertilizer prices. Here we see overlapping of prices of distributors and merchants. Average prices received by distributors being somewhat higher than the average prices reportedly paid by merchants. This is consistent with the fact that some purchases by merchants were direct from factories and some sales by distributors are direct to farmers.

Average prices paid for fertilizer purchased from the private sector, as reported by farmers, exceeded the average prices received as reported by merchants. This difference was quite large during the summer season, ranging from LE 7.27/ton for SSP up to LE 21.48/ton for AN. By the winter 1992/93 season this differential had declined to LE 11.78/ton for AN and had practically disappeared for urea and SSP.

Table 3.10. Summary of prices of three major types of fertilizer sold to farmers, 1992/93, total sample.

Season and item	Urea	AN	SSP
<b>Summer season 1992</b>		LE/Ton	
Distributors: purchases	444.47	360.72	184.21
sales	462.85	385.51	196.29
Merchants: purchases	456.15	377.25	188.21
sales	471.02	390.12	199.13
Farmer purchases from:			
private sector	483.40	411.60	206.40
public sector	464.40	392.80	198.60
Average	471.00	397.60	200.40
<b>Winter season 1992-93</b>			
Distributors: purchases	452.94	409.54	186.11
sales	475.88	423.05	204.44
Merchants: purchases	468.70	390.55	193.33
sales	484.78	403.33	203.43
Farmer purchases from:			
private sector	486.00	415.00	205.40
public sector	476.80	411.00	204.00
Average	482.00	413.00	204.80

Source: Surveys reported above.

This differential is thought to be due primarily to two factors, unlicensed dealers and possible under-reporting of prices by merchants. Very few unlicensed dealers were included in these surveys. The unlicensed dealers usually buy from the licensed dealers and sell to the farmers. As reported in Chapter 6, these unlicensed dealers can buy fertilizer at a lower price than paid by the farmer but likely deliver the fertilizer directly to the farmer. These unlicensed dealers can be regarded as sales and delivery staff for the local merchants who hold a license. Also, part of this differential between prices reported by

farmers and by merchants may result from under-reporting of sales receipts by merchants in fear of taxation.

## **Margins**

Gross margins of distributors and merchants on sales of fertilizer to farmers were reported in Table 3.6. The merchants margins were very consistent between the two surveys. The merchants margins were about LE .75/sack of urea, LE.60-.64/sack of AN and about LE .50/sack of SSP.

The margins for distributors (Table 3.6) were based on sales to farmers. In Tables 6.2 and 6.4 we can see that the distributors had average margins on sales to merchants of about LE 1.00/sack of urea, LE 0.75/sack of AN and only LE 0.10/sack of SSP during the summer season. In the winter season the distributors margins had dropped to LE 0.75/sack of urea and LE 0.50 on AN but had risen to LE 0.70/sack of SSP.

Table 3.11 presents a summary of gross margins on a percentage basis for distributors and merchants over the last two years. These margins were calculated on the basis of the data on prices paid and received that were obtained through the various surveys described in Annex III of this report and in Chapter 6 of the Tranche V report.

First, two words of caution. The data on distributors margins for the summer of 1992 included one sale of 150,000 tons of SSP at a zero margin. This was, no doubt, a special personal arrangement. Excluding this one sale, the average margin for SSP for that period becomes 3.1 percent instead of 1.0 and the average margin for the three major types of fertilizer becomes 4.0 percent instead of 1.9.

Secondly, in the 1991/92 season, the buyers of fertilizer sold by merchants were not identified. Thus, the estimates of margins of merchants (Table 3.11) for the summer of 1991 and the winter of 1991/92 represents all sales by merchants, both to farmers and to other merchants. As shown by the data for 1992-93, (see Annex Tables 3.14 and 3.33) margins on sales between merchants are generally less than on sales by merchants to farmers. However, sales to farmers probably represented the vast majority of these sales(75 to 90 %). Thus, the estimated margins on sales by merchants to farmers for 1991/92 should be increased by about 0.2 percentage points (to about 2.8 percent on average) to be comparable to the estimates for 1992/93.

Table 3.11. Margins on fertilizer sales by distributors to merchants and by merchants to farmers, 1991-1993.

Type of fertilizer	Cropping season			
	Summer 1991	Winter 1991/92	Summer 1992	Winter 1992/93
(Percentage gross margin)				
<b>Distributors margins</b>				
Urea	3.0	2.4	4.6	3.4
AN	2.8	1.9	3.9	2.6
SSP	5.7	5.0	3.1 1/	7.8
Three types	3.1	2.3	4.0	4.9
<b>Merchants margins 2/</b>				
Urea	1.5	2.1	3.2	3.6
AN	2.4	2.3	3.4	3.3
SSP	5.7	4.9	5.8	5.2
Three types	2.6	2.6	3.6	3.6

Sources: Field surveys 1991-1993.

1/ Includes one sale of 150,000 tons at zero margin.

2/ Data gathered in 1991/92 on sales by merchants did not identify whether sold to other merchants or to farmers.

After these adjustments are made it appears that margins of both the distributors and the merchants increased in the 1992/93 cropping year over 1991/92. The reasons for this increase are unknown. Since these margins are unusually low, merchants will likely try to push these margins up to levels of normal profit. The total margins reported here, distributors plus merchants, indicates farmers are paying prices of 8-9 percent over ex-factory prices which is a very reasonable markup.

### Marketing costs

Operating cost data were gathered in the 1992 summer survey from merchants (see Annex Table 3.13) but the quality of the data were not entirely satisfactory and, thus, this type of data were not gathered during the winter season survey. However, the survey did identify the major cost items, interest, storage and labor. Interest and storage costs were not well documented in the survey because these costs are often not cash costs but are fixed operator costs. Annex Tables 3.12 and 3.32 show that the majority of merchants own their own storage facilities

Table 3.12 is provided as a work-up of merchants major operating costs. These are estimates not strictly reported by the surveys but closely reflect reported costs of fertilizer, labor and storage. Interest costs are, for simplicity sake, based on an assumed annual rate of 18 percent, or 1.5 percent per month. Such interest rates were normal in 1992 but are declining (See Figures 7.1 and 7.2, Annex VI).



Table 3.12. Work-up of fertilizer merchants operating costs.

Item	Urea	AN	SSP
		LE/ton	
<b>Merchants purchase price:</b>	450	400	200
<b>Estimated costs:</b>			
Labor, (LE/ton)	1.50	1.50	1.50
Storage (LE/ton/month)	.50	.50	.50
Interest (LE/ton/month)	6.75	6.00	3.00
<b>Total operating costs if fertilizer held for:</b>			
one month	8.75	8.00	5.00
three months	23.25	21.00	12.00
six months	45.00	40.50	22.50
<b>Break-even percentage mark-up if fertilizer held for:</b>			
one month	1.94	2.00	2.50
three months	5.17	5.25	6.00
six months	10.00	10.13	11.25

A comparison of the gross margins reported for merchants in Table 3.11 and the cost estimates from Table 3.12 lead to two main conclusions; a) net profits/ton of fertilizer merchants are very low, and b) quick turn over of inventory is necessary for success in the fertilizer business at the present time. Based on the estimates in Table 3.12, if fertilizer is being held three months, the merchant is suffering a loss. Average rates of turn over were not measured in any of these surveys but are obviously important to the merchant.<sup>20</sup>

Low current marketing margins may appear to be good from the standpoint of the consumer, the farmer, but this may not work for his benefit in the long run. The low margins do not allow the merchants to carry any inventories to meet peak demand periods and also discourages them from dealing in low volume types of fertilizers.<sup>21</sup>

The Benchmark regarding marketing margins is concerned with the margins of public sector distributors, mainly PBDAC, versus the margins of the private sector distributors. The past concerns

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Measurement of average rates of turn over of fertilizer inventories through surveys is difficult. Such measurement would require large amounts of enumerator and respondent time.

See Section 14.3 of the IFDC report cited earlier.

have been that PBDAC, through GOE subsidies and improper cost accounting, could set marketing margins at levels that would prohibit the private sector from being able to make a profit and, thus, keep the private sector out of the fertilizer distribution business. Clearly, this is not what has happened. The survey data indicate (Table 6.4) that by the summer of 1992 the private sector had 30 percent of the share of the fertilizer market and increased this share to 53 percent by the winter 1992/93 season. On the other hand PBDAC's share of factory output continues to decline (see Table 6.9).

Furthermore, the survey data reflect a very competitive marketing situation. The private and public sector firms are now paying essentially the same ex-factory prices (Table 3.10), the prices to the farmer are essentially the same regardless where he purchases fertilizer (Table 3.8), and the margin to the merchant is very low and very competitive (Tables 3.6 and 3.11). The retail prices charged by private merchants are generally slightly higher than the retail prices set by PBDAC which indicates that PBDAC marketing margins are not out of line with private sector costs, and farmers are willing to pay slightly higher prices to private merchants in exchange for better services.

## Conclusions

- Ex-factory prices of locally produced urea, AN and both types of phosphates were within 8 percent of border prices at the end of CY 1992. The ex-factory price of CN was 31 percent above the estimated border price and the price of AS was 24 percent above the border price. However, CN and AS together represent only 3 percent of total nitrogen produced in Egypt. Thus, the weighted average ratio of ex-factory to border prices for all nitrogen was 105 and 102 for all phosphorus production.

Due to the variability in world prices, comparisons of ex-factory prices and border prices should be made periodically during each year.

- GOE budgetary subsidies on fertilizer are continuing to decline. The subsidization of fertilizer imports through a favorable exchange rate was discontinued in July 1991. The GOE budget for FY 92/93 allowed a subsidy of LE 33 M. to be used exclusively on potassium sulfate. The actual subsidy cost for FY 1992/93 is estimated at LE 30. M.
- Marketing margins in the fertilizer markets are being set by the private sector and, thus, PBDAC's margins are not interfering with the private sector marketing operations.
- **Thus, all aspects of this Benchmark relating to fertilizer pricing have been met.**

## **BENCHMARK NO. 4**

### **PRICING OF WHEAT BRAN AND COTTONSEED CAKE**

#### **Introduction**

Manufactured animal feeds in Egypt can be categorized into two types, traditional and non-traditional. Traditional feeds are those which use cottonseed cake or wheat bran as the source of protein. Prices of traditional livestock feeds were subsidized in the past and distributed according to GOE decree by the PBDAC. Subsidies on traditional feeds were discontinued in December 1991.

**Benchmark:** "By the end of March 1993, wheat bran and cotton seed cake will be freely traded at prices set according to market forces."

#### **Background**

Non-traditional feeds may use other sources of protein, such as urea, or other food by-products such as soyabeans. The prices of these feeds have not been subsidized by the GOE.

Animal feed in Egypt is presently produced mainly by the Ministry of Industry (MOI) and by the Public Authority for Mills and Rice Marketing of the Ministry of Supply and Internal Trade (MOS). The MOI produces the traditional feeds and some non-traditional components. The MOS produces non-traditional feed. The percentages of the principal components included in feed production vary according to their availability which depends upon the production of the crop sources.

Cottonseed cake and wheat bran are the main sources of protein. Cottonseed cake was the major source of protein during the period 1973-1990. As cotton production declined, the percentage of cottonseed cake in feed also declined until it reached 15 percent in traditional feed, 10 percent in non-traditional feed produced by MOI and 6 percent in non-traditional feed produced by MOS. The reduction of cottonseed cake was offset by increased use of wheat bran.

#### **Cottonseed Cake**

Table 4.1 presents production and price data for cottonseed cake for the period 1981-92 which show the decline in the production of cottonseed cake as discussed above. During this period the price of cottonseed cake was increased from LE 7.5/ton in 1981 (the same price that prevailed in the 1960s) to about LE 41/ton in December 1985, then to LE 125/ton in 1988. During 1989 and

1990 the MOI purchased cottonseed cake at LE 125/ton for the production of traditional feeds. This price was increased significantly to LE 250/ton in October, 1991. These price increases indicate declines in government subsidies.

On the other hand, the MOS purchased cottonseed cake at LE 425/ton in 1990 and LE 400/ton in 1991 for the production of non-traditional, free market feeds. The difference between these free market prices and the subsidized price constitutes the implied subsidy on cottonseed cake. Thus, the implied subsidy on cottonseed cake used in feed manufacture was LE 275 per ton in 1989, LE 300 in 1990, and LE 150 in 1991. Feed manufacturers surveyed in April 1993 reported average prices paid for cotton seed cake of LE 454/ton.<sup>22</sup>

Table 4.1. Production and prices of cottonseed cake, (1981-1993).

Year	Production	Price to Feed Factories	
		Traditional	Non-traditional
		Feed Producer	Feed Producer
	(000) Tons	LE/Ton	
1981	542	7.5	-
1982	579	7.5	-
1983	515	7.5	-
1984	510	7.5	-
1985	430	7.5	-
1986	460	41.212	-
1987	512	41.212	-
1988	435	41.212	400 1/
1989	391	125.-	400
1990	338	125.-	424
1991	343	250.- 2/	400
1992	362 3/	400.	400
1993	---	454. 4/	454

1/ The MOI began producing non-traditional feed in 1987.

2/ Price increased 15 Oct. 1991.

3/ Includes municipalities, MOS and MOI.

4/ Survey of feed manufacturers(see below).

Part of the price increase in later years is due to higher freight costs. MOI feed manufacturing plants generally pay less freight than do private sector plants because public sector feed plants are located near or with the cottonseed cake plants.

## Wheat Bran

Table 4.2 provides data on the quantities of wheat bran and cottonseed cake used in feed manufacturing. The total supplies of cottonseed cake and wheat bran depend upon crop production as stated above. Note however the large shift from traditional to non-traditional feeds. The quantity of wheat bran used to produce traditional feed declined from 545,000 tons in 1989 to 151,000 tons in 1992 while the quantity used for non-traditional feed increased from 321,000 tons to 544,000 tons.

Table 4.2. Quantities of cottonseed cake and wheat bran used in producing animal feed, (1989-1992).

Item	:	Calendar Year			
	:	1989	1990	1991	1992
:					
Cottonseed cake:		(000) Tons			
Traditional feed		242	133	141	---
Non-traditional feed					
MOI		77	82	44	340*
MOS		51	43	36	17
Total cottonseed cake		370	258	221	357
Wheat bran:					
Traditional feed		545	462	333	151
Non-traditional feed					
MOI		193	206	176	381
MOS		128	108	210	163
Total wheat bran		866	776	719	695

\* The bulk of the cottonseed cake used by MOI in 1992 was for non-traditional feeds. The distinction between traditional and non-traditional feeds has little meaning with out subsidies.

Table 4.3 reports the prices of wheat bran used in producing various types of feed during the 1988-92 period. There are three prices for wheat bran which are used in manufacturing feed depending on the type of product. There is a price for wheat bran used to produce traditional animal feeds. This price was LE 30/ton in 1989 and LE 100/ton in 1990. In Dec. 1991 the price of wheat bran was increased to LE 250 for all types of feeds (See letter enclosed in Figure 4.1). Thus, the implied subsidies on wheat bran were discontinued as of that date.

The implied subsidy on wheat bran is the difference between the prices for traditional and non-traditional animal feeds and the free market prices. The price of wheat bran used in all non-traditional feeds produced by the public sector throughout 1991 was LE 350/ton, the same price as in the private sector, thus, indicating no implied subsidy for this type of feed.

Table 4.3. Prices of wheat bran used in feed production,  
(1988-1993).

Type of feed	Calendar Year					
	1988	1989	1990	1991	1992	1993
			LE/ Ton			
Traditional feed	30	30	100	100-250*	200	200
Non-traditional						
Animal feed	100	250	300	350	226	200**
Poultry feed	200	300	350	350	325-400	---

Source: MALR, Central Administration for Animal Production, Records of the Directorate General of Feed, (Unpublished data).

\* Price increased to LE 250/ton on 1 November, 1991.

\*\* Effective April 18, 1993 all wheat bran used for animal feed was priced at LE 200/ton

In the case of wheat bran used to produce traditional feed, a price difference of LE 250/ton existed until December, 1991. The quantity of wheat bran used for traditional feed during 1991 prior to that date is reported as 333,000 tons. The 1993 price of LE 220/ton for wheat bran reflects a decline which has resulted from a situation of excess supply as discussed below.

## **SURVEY RESULTS**

### **Feed merchants**

In the winter survey of fertilizer and seed merchants (see Annex III), some questions were directed to merchants who sold poultry and livestock feed. In the survey of 143 merchants, 10 merchants reported selling feed.<sup>23</sup> Eight of these merchants sold livestock feed but only one reported any governmental regulations affecting his business. This one merchant complained of the GOE requirement for a license to operate the business and of the requirement to have an agricultural engineer on his staff.

### **Feed manufacturers**

A survey of feed manufacturers was conducted to determine what government regulations, if any, interfere with the production and distribution of animal and poultry feed.<sup>24</sup> The sample included 11 public sector firms and 9 private sector firms. All of the private sector firms are in the Public Enterprise Sector which operate as private sector companies in terms of profit maximization but ownership is still largely held by the GOE. Eight of the private sector firms were manufacturers and one was a distributor but it provided responses on opinion questions.

### **Sources of protein and type of feed**

The feed manufacturing firms were asked to report the type and amount of protein sources used in 1992 and the type of feed produced with these ingredients. The data (Table 4.4) show large differences between the two groups of firms. The public firms are associated with the cotton or the wheat processing sectors where cotton seed cake and wheat bran are by-products. These firms produce primarily (99 percent) traditional livestock feeds. The firms in the business sector on the other hand are much smaller and produce mainly poultry feeds. The average output of the private sector firms was only 5 percent that of the average public sector feed plant and about 78 percent of the feed ingredients were used for poultry feed. It is also worthy to note that the public sector firms used only wheat bran and cotton seed cake but no soyabean meal while none of the private firms reported the purchase of cottonseed cake.

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The sample was not a random sample of all agricultural input merchants but was preselected to include mainly fertilizer and seed merchants.

An English translation of the questionnaire is available in Annex IX. and the data file containing the survey data is listed in Annex X.



Table 4.4. Quantities of feed ingredients used in 1992  
by the sample firms, average per firm.

Item	Public firms	Private firms
<b>Animal feed</b>	(Metric Tons)	
Wheat bran	34,048	412
Cotton seed cake	10,620	---
Other*	---	83
<b>Poultry feed</b>		
Wheat bran	365	735
Cotton seed cake	182	---
Other*	---	1,016
<b>Total</b>	45,215	2,246

Source: Field survey, April, 1993.

\* Primarily soyabean meal

All of the feed manufacturing firms in the sample, public and private, sold some or all of the feed they manufactured. One of the public firms and three of the private firms also used some of the feed it produced for its own feeding programs.

All of the public firms reported that they sell feed through both their own dealers and through other dealers. Two of the private firms reported selling only through their own dealers, 5 reported selling through both their own and other dealers and two reported that they sold their feed only to buyers who purchased their baby chicks. This is an example of integration between the feed manufacture and poultry industries common in western economies.

## Prices

Feed manufacturers were asked to report current prices paid for feed ingredients. Since private feed manufacturers did not use cottonseed cake, data on this ingredient was obtained only from public sector firms. Actually, only eight firms provided data on cottonseed cake. Two firms did not report a price because their firm produced cottonseed cake so they did not buy it. The average price reported for cottonseed cake was LE 454/ton.

Prices for wheat bran were reported by all 11 public sector firms and by seven private sector firms. The prices reported by public sector firms ranged from LE 200 to LE 250 with a simple average of LE 223. The private sector firms reported prices ranging from LE 225 to 250 with an average of LE 234. The overall average price reported was LE 227. However, due to the small sample and large variation, we cannot conclude that the difference in prices between public and private sector firms is significantly

different. Note however that these prices are below the prices of LE 250 to 350/ton set by the GOE in November 1991.<sup>25</sup> The 1993 survey of feed manufacturers gave a price of LE 223/ton for wheat bran. This reflects a price decline which has resulted from a situation of excess supply discussed below.

Prices paid for soyabean meal were reported by three private sector firms. Reported prices ranged from LE 900 to LE 1000/ton.

### **GOE regulations**

The respondents in the survey were asked to give their opinions regarding any government regulations which exist which interfered with or affected their feed manufacturing and distribution operations. Most of the responses received did not actually represent complaints about government regulations. Seven of the eleven public firms reported that feed production was exceeding demand, one firm said this was due to the cancellation of the national veal project.

A lack of quality control by the government was the 2nd most frequent complaint. Four public firms and one private firm complained about private factories operating without licenses who cheat on feed, and two public firms complained of a lack of government sampling and analysis of feeds.

Some firms are apparently having difficulties coping with competition. Three public firms and one private firm complained that ingredient prices were too variable and two private sector firms complained about too much variation in demand for feed by producers. Apparently these firms have not adjusted to the free market type of operation where feed suppliers attempt to fill consumer demand but instead want the consumer to buy whatever he has for sale.

Two private sector firms reported that the public sector has a monopoly on cotton seed cake. This is quite true since all cotton ginning and wheat milling is done in public plants. This GOE monopoly on the supply of cottonseed cake will likely be broken in the near future by the privatization of cotton marketing and ginning (see Chapter 1).

### **Availability of feed ingredients**

The feed manufacturers were asked in the survey if they could purchase all the wheat bran and cotton seed cake that they needed. Surprisingly, one public firm responded that it could

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Prices of wheat bran reported in Table 4.3 reflect GOE sales prices while survey results report prices delivered to feed plants. A major part of the difference is freight.

not but all private firms said that they could, including those who said the government had a monopoly on cottonseed cake.

**Conclusions:**

- o The GOE currently is the sole source of cottonseed cake but this situation will likely change with the privatization of cotton marketing.
- o The manufacturing of animal feeds is shifting from traditional feeds to non-traditional feeds with accompanying adjustments in prices and with no subsidies.
- o Data from public sources and from feed manufacturers indicate that wheat bran and cottonseed cake are available, to all feed manufacturers, is freely traded, and thus meeting this Benchmark.

## BENCHMARK NO 5.

### COTTON PEST CONTROL POLICIES

#### Introduction

The GOE has long managed and paid the bulk of the costs for cotton insect control. Farmers in recent years paid LE 20/FD for this service. Prior to February, 1991, pesticide chemicals were purchased at favorable exchange rates. Some of these chemicals are still available. The GOE in recent years has attempted to use integrated pest management control methods and in 1993 used pheromones on a large scale to reduce costs and to minimize the adverse environmental effects. The GOE is slowly shifting the control and costs of pest control to the producer.

**Benchmark:** "By the end of March 1993, charges for cotton pest control, for the cotton crop to be planted in CY 1993, will be adjusted so that the combined total of explicit and implicit government subsidies will be announced and reduced by 25 percent of the 1992 level according to the liberalization plan of cotton in C.1 above."

Note: Item No. 4 of Sec. IV of the cotton liberalization plan reads as follows: "Government supervision of the pest control program should be continued but price controls and subsidies on pest control materials eliminated gradually and producers and private contractors encouraged to carry out approved pest control measures."

#### DECREES

No new decrees were issued in regard to the GOE cotton pest control program. Previous decrees which set the farmer charges for the cotton pest control program at LE 20 per feddan for the 1991 and 1992 seasons were unchanged and remained in effect for the 1993 cotton production season.

## SURVEY RESULTS, 1992 SEASON<sup>26</sup>

Verification of this Benchmark depends primarily upon data provided by MALR on total government pest control costs and subsidies. However, field surveys indicated that many producers conducted pest control programs of their own on the 1991 cotton crop and, thus, a survey of producers was conducted to get a complete picture of all cotton pest control activities in 1992.

The governmental pest control program was scaled back in 1991 to include control only of cotton boll weevils through a combination of a manual and chemical programs. The chemical program consisted of three sprayings for which the government paid full costs except the charge of LE 20 per feddan. All costs of the boll weevil control program in excess of LE 20 per feddan were borne completely by the GOE.

The 1992 GOE cotton pest control program was similar to 1991 when the GOE paid for three sprayings of boll weevils with any additional boll weevil sprayings to be paid by the producer. The survey of 1992 cotton produces included a sample of 300 producers selected from the nine major cotton governorates. The sample was selected in proportion to the area of cotton produced in these governorates in 1992 with the exception that a minimum sample of 25 per governorate was specified. The sample was further stratified by variety of cotton in proportion to the area planted as follows:

Sample size	
Assuit	25
Behira	50
Beni Suef	25
Damietta	25
Daqahliya	44
Gharbiya	31
Kafr El Sheikh	38
Minya	25
Sharquia	37
Total	300

Of this total sample, 91 farms produced extra long staple (ELS) varieties and 209 produced long staple varieties (LS) of cotton. (most of the farms in Behira, Kafr El Sheikh and Damietta produce ELS varieties of cotton).

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See Annex IX for the English translations of all questionnaires and data codes used for Tranche VI surveys and Annex X for a list of the data files.

The data in Table 5.1 describe the sample farms and a summary of some key cotton production practices, namely the date of planting and the number of pickings. Surveys revealed that in 1991, 53 percent of the cotton was picked only one time, 44 percent was picked twice and 3 percent was picked three times for an average of 1.5 pickings. The results for 1992 show that 7 percent was picked once, 50 percent was picked twice, 42 percent was picked three times and 1 percent picked four times for an average of 2.18 times. This is a very significant change in only one year. Perhaps, and hopefully, this change is a permanent response to higher cotton prices.

Table 5.1. Description of sample for survey of pest control activities and 1992 cotton production practices.

ITEM	ELS Varieties	LS Varieties	Total Sample
Sample size	91	209	300
		FD/farm	
<b>Area of holding</b>	9.49	5.21	6.51
1992 cotton quota	3.43	2.27	2.62
1992 actual area of cotton	3.39	2.26	2.60
		Kentar/FD	
<b>Cotton yield</b>	6.99	7.21	7.13
<b>1992 cotton production practices</b>			
Week of planting	Percent of farms		
1st week of March	4	4	4
2nd " " "	10	14	13
3rd " " "	15	21	19
4th " " "	26	27	27
1st week of April	30	13	18
2nd " " "	12	11	11
3rd " " "	1	7	5
4th " " "	0	1	1
1st week of May	1	0	0
2nd " " "	0	0.5	0
Ave. week of planting	Last week of March		
<b>No. of pickings of cotton</b>	Percent of farms		
1 picking	1	19	13
2 picking	55	56	55
3 picking	44	24	30
4 picking	0	2	1
Average	2.43	2.09	2.19
	Percent of cotton area		
1 picking	0	11	7
2 picking	58	45	50
3 picking	42	42	42
4 picking	0	1	1

Source: December 1992 field survey.

**GOE boll weevil program**

The 1992 Egyptian cotton pest control system included three components, namely 1) the governments subsidized program for control of boll weevil, 2) additional optional sprayings by the government at the request of and paid for by the producer, and 3) producers own pest control programs. The government boll weevil program includes two components, a manual program of picking of the boll weevil worm eggs, and a chemical program. Additional sprayings requested by the producers may be for the control of the boll weevil or for other pests such as aphids or leaf worms.

The survey of 300 producers examined each of these aspects of the pest control program. Table 5.2 describes the number of spraying under the government boll weevil program. Basically, three spraying were made if needed. The results show three sprayings were made on all sample farms producing ELS but 1 to 4 sprayings reported by producers of LS varieties. Based on the area sprayed, the average number of sprayings on LS cotton was also three.

Table 5.2 Sprayings under the GOE boll weevil program.

ITEM	ELS Varieties	LS Varieties	Total Sample
Sample size	91	209	300
<b>No. of sprayings</b>	Percent of farms		
1	0	1	1
2	0	5	3
3	100	86	91
4	0	8	5
<b>No. of sprayings</b>	Percent of cotton area		
1	0	1	1
2	0	4	3
3	100	89	92
4	0	6	4
<b>Average No. of sprayings</b>	3.0	3.0	3.0

Source: December 1992 field survey.

Table 5.3 describes the GOE manual program of picking of boll weevil worm eggs. The number of pickings varied widely, from zero to 20 times. Weighted by area, the average number of pickings was about 10 times for both ELS and LE varieties. The picking of worm eggs is done primarily by children who are paid by the government and a regular program of weekly pickings is followed to eliminate the hatching of newly laid eggs.

Table 5.3. Picking of boll worm eggs under the government pest control program, 1992.

ITEM	ELS Varieties	LS Varieties	Total Sample
<b>No. of Pickings</b>		Percent of farms	
0-3	0	21	15
4-6	1	12	9
7-9	20	11	14
10-12	74	29	41
13-15	5	20	16
16-20	0	7	5
<b>No. of Pickings</b>		Percent of cotton area	
0-3	0	20	13
4-6	0	7	5
7-9	29	11	18
10-12	68	28	42
13-15	3	26	17
16-20	0	8	5
<b>Average no. times worm eggs were picked:</b>	10.0	9.5	9.65

Source: December 1992 field survey.

#### Optional Government program

Survey results (Table 5.4.) indicate that 71 percent of the sample farms requested additional sprayings by the government which applied to 64 percent of the cotton. Farms using the optional government program were generally the smaller farms in terms of area of cotton planted. The data indicate more sprayings on LS cotton than on ELS. As shown in this table, the cost of spraying one feddan one time is approximately LE 50 to 65. The resulting costs were LE 57 and LE 93 per feddan on ELS and LS cotton respectively on the cotton which was treated. This represents LE 32.92 and LE 63.77 for the average feddan of ELS and LS cotton respectively, or an average expenditure for pest control under this program for all cotton of LE 51.58/FD.



Table 5.4. Optional spraying under government pest control program, 1992.

ITEM	ELS Varieties	LS Varieties	Total Sample
<b>No. of sprayings</b>	Percent of farms		
1	64	34	43
2	7	30	23
3	1	6	4
4	0	0	0
5	2	0	1
Total	74	70	71
Average	1.13	1.75	1.53
<b>No. of sprayings</b>	Percent of cotton area		
1	53	29	39
2	4	30	19
3	1	6	4
4	0	3	2
5	0.4	0.2	0.3
Total	58	68	64
<b>Cost of spraying</b>	LE/FD		
1	49.06	63.40	55.67
2	145.62	91.57	95.73
3	77.50	202.66	186.49
4	---	180.00*	180.00
5	155.98	268.81	209.34
<b>Average cost on treated cotton</b>	56.67	93.39	80.27
<b>Average cost on all cotton on sample farms</b>	32.92	63.77	51.58

Source: December 1992 field survey.

\* Only one farm.

#### Farmers own pest control activities

In addition to the GOE boll weevil program and the GOE optional pest control program, many cotton producers pursue their own pest control program. These activities are described in Table 5.5. About nine percent of the sample farmers performed additional manual worm egg removal programs which covered eight percent of the sampled cotton area. This program resulted in an estimated cost for all cotton on the sample farms of only LE 1.35/FD.

A majority of the ELS producers (53 percent), and about 1/3rd of the LS producers (31 percent), pursued chemical pest control programs which covered 59 and 44 percent respectively of the cotton areas. In comparison, in 1991 about 47 percent of the ELS producers and 17 percent of the LS producers had a chemical

program of their own which covered 57 and 34 percent of the cotton.<sup>27</sup>

These data also indicated that on average, the farms who conducted their own chemical programs were the larger farms in terms of area of cotton. In contrast, farms that tended to be smaller than average used the governmental optional spray program. This is quite rational. The larger farms can operate their own program at a reasonable cost while smaller farms would find it more economical to hire these operations done for them.

Overall, the producer managed chemical pest control program resulted in an expenditure of LE 20.57/FD on ELS cotton and LE 26.33/FD on LS cotton for an overall average of LE 24.00/FD on all cotton on the sample farms.

In summary, farmer expenditures for pest control in 1992 on the average feddan were LE 51.58 for the optional GOE sprayings, LE 1.35 for the farmers own manual program, and LE 24.00 for farmers chemical program for a total expenditure of LE 76.93/FD. In addition, the producer is charged LE 20/FD for the regular GOE program for an average total cost for all cotton of LE 96.93/FD.

Table 5.5. Farmers own pest control activities in 1992.

ITEM	ELS Varieties	LS Varieties	Total Sample
<b>Manual program:</b>			
Percent of farms	7	9.5	8.7
Percent of cotton area	9.8	6.4	7.7
Ave. No. pickings	2.2	4.0	3.1
Cost of area treated: (LE/FD)	10.51	24.40	17.44
Ave. cost over all cotton planted: (LE/FD)	1.03	1.55	1.35
<b>Chemical program:</b>			
Percent of farms	53	31	38
Percent of cotton area	59	44	50
Cost of area treated: (LE/FD)	35.07	59.75	48.21
Ave. cost over all cotton planted: (LE/FD)	20.57	26.23	24.00

Tranche V Monitoring and Verification Report on Performance Under the Agricultural Policy Reform Program, Agricultural Production and Credit Project. Ministry of Agriculture and Land Reclamation, Arab Republic of Egypt, June 1992, Annex II, page 3.

Source: December 1992 field survey.

### **Variability of pest control costs**

Tables 5.4 and 5.5 summarize the program costs by cotton type, by ELS and LS. Some of these same data are presented in Table 5.6 by governorate to show the variation in these cost items between governorates. For instance the optional government program was used by only 22 percent of the cotton producers in Minya and Damietta, but 98 percent in Gharbiya. The cost of this practice varied from LE 40/FD in Minya to LE 161/FD in Sharquia.

Similarly, additional manual pest programs were not practiced by any producers in four governorates but ranged as high as 30 percent in Daqahliya. Farmers own chemical programs were conducted by only four percent of the farms in Minya but by 60 percent of the farmers in Damietta.

The totals for these three voluntary programs included in Table 5.6 show a range in costs from a low of LE 12/FD in Minya to a high of LE 199/FD in Sharquia. This variation in costs is largely a result of variation in insect infestation which in turn results from a large number of both cultural practices and natural phenomena.

The reader should remember that these measures of variability are based only on the use of average data by governorate. The variability of such costs from farm to farm is much greater. For example, the cost of the government optional program in Sharquia ranged from a zero cost per feddan on some farms up to LE 200 per feddan on one farm.

Table 5.6. Comparison of cotton pest control costs by governorate, 1992.

Governorate	Percent of farms	Percent of cotton area	Cost LE/FD Treated	Cost LE/FD All cotton
<b>Optional government program</b>				
Assuit	20	36	50.13	18.20
Minya	20	22	40.02	10.93
Beni Suef	68	79	96.02	75.44
Sharquia	95	97	160.78	156.37
Daqahliya	73	53	82.22	43.87
Gharbiya	94	98	94.66	92.84
Kafr El Sheikh	97	95	48.68	46.27
Damietta	48	22	52.74	11.38
Behira	72	65	67.59	43.62
All sample	69	64	80.27	51.58
<b>Farmers own manual program</b>				
Assuit	0	0	---	---
Minya	0	0	---	---
Beni Suef	4	2	5.00	.12
Sharquia	3	1	35.31	.40
Daqahliya	30	12	36.53	4.56
Gharbiya	0	0	---	---
Kafr El Sheikh	8	23	2.65	.60
Damietta	24	16	23.21	3.68
Behira	0	0	---	---
All sample	8	8	17.44	1.35
<b>Farmers own chemical program</b>				
Assuit	56	69	55.80	38.42
Minya	4	11	10.00	1.09
Beni Suef	12	18	29.07	5.24
Sharquia	51	60	70.77	42.15
Daqahliya	52	53	78.15	41.62
Gharbiya	23	29	48.34	13.86
Kafr El Sheikh	18	20	10.89	2.13
Damietta	60	84	66.05	55.59
Behira	48	65	14.61	9.44
All sample	38	50	48.21	24.00

Source: December 1992 field survey.

### Farmers opinions

The sample of 300 farmers were asked to give their opinions about the GOE pest control program (Table 5.7). These questions were included to provide guidance to the administrators of the pest control program and perhaps to facilitate the transfer from government operated programs to private programs. About two thirds of the sample farmers indicated satisfaction with the current program. The major complaint was that the chemicals used

were ineffective and that the sprayings were done at the wrong time. The reader should be cautioned to remember that these, are only opinions. Farmers may not know if the chemicals are ineffective.

Table 5.7. Farmer opinions about the government cotton pest control program.

ITEM	ELS Varieties	LS Varieties	Total Sample
<b>Farmers opinions</b>	(Percent of farmers who say YES)		
Satisfied with gov. program	62	67	65
Not enough sprayings	10	20	17
Too many sprayings	10	5	6
Ineffective chemicals	24	27	26
Spray at wrong time	29	25	26
Damage to other crops	11	13	12
Poor administration	11	20	17
<b>Major comment</b>			
Spraying is done at the wrong time and wrong chemical is used. (percent of farmers)	8	10	9
<b>Could you pay 50% of costs if the cost was LE 250/FD at present cotton prices:</b>	59	53	55
<b>Could you operate your own pest control program:</b>	47	42	44
Cost is too high:	66	58	60
Know what chemicals to use:	53	34	40
Can get chemicals:	48	47	47
Can get equipment:	52	49	50
Can control the pests:	49	37	41
<b>Major comment</b>			
Want loan with easy terms:	2	5	4
<b>Do you prefer to operate own program or government program</b>			
Own:	57	51	53
<b>Government program:</b>	43	49	47

Source: December 1992 field survey.

Farmers were also asked if they believed that they could afford to pay 50 percent of the full cost of a pest control program which would cost LE 250/FD under current cotton prices. The cost estimate of LE 250/FD is a arbitrary estimate used only for the survey. The majority (55%) of the sample farmers indicated that they could afford this cost at current prices.

When asked if they could operate their own pest control program, 44 percent gave an affirmative reply. Other responses indicated that about half of the farmers thought that they do not have the knowledge to operate such a program or have access to the chemical or equipment needed. On the other hand, 53 percent indicated a preference to operate their own program versus a government program.

Many government officials believe that farmers generally are not qualified to operate effective pest control programs on cotton. Many farmers disagree with this opinion. In any case, successful pest control programs under farmers control would certainly require assistance from agricultural extension personnel.

### **Survey of merchants**

In the winter survey of fertilizer and seed merchants(see Annex III) 45 pesticide merchants responded to questions in regard to the cotton pest control program. Of the 45 merchants, 40 of them (89 %) said that they could provide farmers with advice on the proper chemicals needed for cotton pest control, and 36 of them (80 %) reported they had these chemicals available.

In addition, these merchants were asked if any problems would result if the government discontinued its cotton pest control program. A total of 26 of these 45 merchants (58%) reported that in their opinion some problems would exist. The major responses were as follows:

<u>Problem</u>	<u>No. of responses</u>
High cost of pesticide control	16
Farmers neglect control program	6
Lack of equipment among farmers	4
Lack of pesticides	3
Farmers won't work together in spraying	2

The increased cost of pest control to the farmer is obviously a problem for the farmer. The problems resulting from farmers neglect of proper control, lack of cooperation, or lack of knowledge of proper chemical use would have to be addressed through GOE educational programs.

## OFFICIAL STATISTICS

### Pesticide use in the 1992 GOE program

Use of pesticides for pest control on cotton by the GOE decreased with the 1990 crop but increased with the 1991 crop as a result of greater infestation of cotton pests. In 1991 the average number of treatments for boll worms increased to 3.49 compared with 2.9 treatments in 1990 (Table 5.8). Similarly, the average number of treatments for boll worms increased in 1992 over 1991. This increase in number of sprayings in 1992 resulted in increased costs as reported below.

Table 5.8. Total cotton planted area treated against pests,  
(crop years 1991 and 1992).

Item	: 1991		: 1992		: Percent : Change
	: Feddan	Percent:	: Feddan	Percent:	
Area of cotton planted	851,283	100	840,267	100	-1.3
<u>Area treated for:</u>					
primary pests	173,288	20	156,559	19	-9.7
boring & sucking insect	171,599	20	188,951	22	10.1
Total	344,887	40	345,510	41	0.2
<u>Area treated for boll worms:</u>					
ground spraying	2,013,917	237	1,753,455	209	-13.0
aerial spraying	960,173	113	1,480,987	176	54.2
Total	2,974,090	349	3,234,442	385	8.8
<u>Number of sprayings for</u>					
boll worms:		3.49		3.85	10.3

Source: MALR, Under Secretary for Pest Control.

The data in Table 5.9 indicate the same prices paid for most pesticides used in 1992 as in 1991. This results from the fact that much of the pesticide materials used in 1992 were purchased in 1990 or earlier. In 1992, one new chemical was used that had not been used in prior years and four chemicals used in 1991 were not used in 1992. These data indicate that the import (US\$) cost of the chemicals used in 1992 was almost the same as in 1991.

### Indirect Subsidy:

The indirect, or exchange rate subsidy, is the difference between the cost of the pesticide chemicals in local currency at the official exchange rate and what the cost would have been at the free market exchange rate. In 1989 the official exchange rate was 0.707 (LE/US\$) compared to a free market rate of 2.54. In 1990 the official rate was increased to 1.11 and the free market rate increased to 2.73.

Table 5.9. Amount and value of pesticides used to control cotton pests, (1991 and 1992 crop years).

Pesticide	1991			1992		
	Amount (Tons)	Price (\$/Ton)	Value (000)US\$	Amount (Tons)	Price (\$/Ton)	Value (000)US\$
Empire DC(Liq.)	364.7	8,400	3,063.5	479.8	8,950	4,294.2
Deenate Deeza	228.7	8,800	2,012.6	367.7	8,800	3,235.8
Larvin(Pow.)80%	167.5	16,800	2,814.0	104.7	17,800	1,863.7
Tamaron Combi	169.4	4,250	720.0	18.5	4,250	78.6
M X	0.6	11,600	7.0	0.4	11,600	4.4
Merlin DC 806	202.7	8,480	1,713.9	70.2	8,500	596.7
Kotapron	547.9	11,090	6,076.2	390.4	11,900	4,645.8
Curacron	75.2	8,770	659.5	187.7	9,471	1,777.7
Tebr	11.0	8,400	92.4	19.0	8,400	159.9
Karate	7.0	7,415	51.9	1.9	7,415	14.1
Nuvacron 40%	68.8	5,970	410.7	28.7	5,970	171.3
Tamaron 600	109.8	3,462	380.1	81.3	3,462	281.4
Bromide 50%	57.1	4,635	264.7	---	---	---
Symptosh CCN	11.6	9,277	107.6	18.2	9,277	168.4
Meothrin	21.6	6,175	133.3	74.8	6,175	461.6
Depsis RUP	6.0	6,402	38.4	113.5	6,402	726.6
Hostathion	161.7	3,295	532.8	96.4	3,295	317.6
Rizolex	64.5	8,100	522.5	---	---	---
Monceren	62.5	8,100	506.3	---	---	---
Larvin (Liq.)	85.1	8,400	714.8	153.2	8,400	1286.9
Sevin 85%	172.8	3,976	687.1	56.6	4,500	254.7
Fenom	1.0	32,567	32.6	0.2	32,567	4.9
Azodrin 40%	54.8	5,720	313.4	24.1	5,720	137.9
Polytrin	2.2	20,813	45.8	0.1	20,813	1.0
Pestox	5.8	44,900	260.4	6.4	44,900	287.4
Ripcord	0.2	31,110	6.2	0.1	31,110	2.5
Dursban	85.5	7,000	598.5	347.3	7,500	2604.8
Fastac	3.1	63,350	196.4	0.7	63,350	46.2
Fenval	10.7	8,350	89.3	7.6	8,350	63.5
Patheroid	4.6	7,000	32.2	146.8	7,000	1027.6
Sumi-Alpha	40.9	9,045	369.9	7.5	9,045	68.1
Somsidin	47.1	10,300	485.1	2.0	10,300	20.1
Cypha	30.9	16,750	517.6	16.6	16,750	278.0
Diatheen M 45	280.0	4,455	1,247.5	---	---	---
Kafromon	54.6	5,020	274.1	34.2	5,020	171.7
Nurelle	54.1	18,300	990.0	65.1	18,300	1191.3
Kindo	84.6	19,761	1,671.8	30.6	16,300	498.8
Cyanox	15.5	6,145	95.2	343.8	7,420	2550.8
Gusathion	31.8	4,250	135.2	12.1	4,250	51.4
Polo 500	15.5	29,000	449.5	12.6	29,000	365.4
Abloid	75.0	28,750	2,156.3	52.2	28,750	1500.5
Deltanet	---	---	---	7.8	15,964	124.5
Total	---	---	31,476.2	---	---	31,335.6

Source: MALR, Under Secretary for Pest Control.



In this report the indirect subsidy reflects the difference between the official exchange rate and the market rate **at the time the pesticide materials were purchased.** As stated above, many of the chemicals used in 1991 and 1992 were purchased in 1990 or earlier, thus, the differential between these two exchange rates in 1990 or earlier years is still relevant and were used for computing indirect subsidy costs in 1991 and 1992.

The US dollar cost of the materials imported for use in 1992 is reported in Table 5.10 at \$31,335,600 and a local currency cost of LE 50,498,300 at the official exchange rate but LE 91,446,600 at the free market rate. Thus, the official rate at the time of import of these materials averaged 1.611 compared to an average free market rate of 2.918.

On Feb. 27, 1991 the GOE adopted a free market exchange rate system but retained a "Primary Rate" which was to be maintained by the Central Bank within 5 percent of the average free market rate. This primary rate was to be used in the importation of "essential supply commodities", including fertilizer and pesticides for cotton.

In July 1991, the GOE announced that this Primary Rate would no longer be used to import essential commodities. Thus, the subsidization of pesticide imports into Egypt through the exchange rate mechanism was terminated as of July 1991. However, although no additional pesticide materials will be purchased at a preferential rate, some indirect subsidy will continue until all materials purchased under the program are used.

During 1992 some pesticides were purchased for the cotton pest control program at the free market rate which averaged 3.32. These materials are included in Table 5.9.

The cost estimates in Table 5.10 indicate that the indirect subsidy decreased from LE 45.9 M. in 1991 to LE 40.9 M. in 1992. This resulted from a small reduction in the dollar cost of materials used but was mainly due to the fact that a higher percentage of the materials purchased for 1992 were purchased at the free market official exchange rate.

## **Direct Subsidy**

The direct subsidy is the difference between the total GOE costs of the pest control program and the charges to the farmer (Table 5.10). The cost of the pest control program, excluding the exchange rate subsidy, was LE 140 M. in 1990, LE 142.3 M. in 1991 and LE 190.5 M. in 1992. The two major cost items are the chemical program and the manual control program. Costs of the chemical program include the cost of materials at the official exchange rate and the costs of application of chemicals.

By subtracting the costs of materials at the official rate, we see that the costs of application of the chemicals rose from LE 52.8 M. in 1990 to LE 71.8 M. in 1991. This 36 percent increase is largely a result of inflation in application costs since the total area sprayed had decreased. Costs of the manual program declined considerable in 1991.

In 1992 the cost of applying the chemicals increased to LE 104.6 M. or an increase of LE 32.8 M. The cost of additional chemicals in 1992, at free market rates, was LE 10.7 and other costs increased by LE 4.5 M for a total increase in 1992 of LE 48 M. over 1991 costs.

The charges to farmers for the pest control program has remained at LE 20 per feddan for the three years, 1990, 1991 and 1992.

## **Total Subsidies, 1992 Crop:**

Thus, the total subsidy costs of the cotton pest control program were LE 155.2 M. in 1990, LE 170.4 M. in 1991, and LE 213.4 million in 1992. Costs per feddan and per kentar are shown in Table 5.10.

The MOU Benchmark for Tranche VI does not require a specific reduction in this subsidy in 1992, but rather, a 25 percent reduction in total subsidies in 1993 compared to the 1992 level. Thus, the estimates contained in Table 5.10 establish the benchmark, or target for the 1993 crop year. Hence, in 1993 the target will be a reduction of 25 percent of the total subsidy on the 1992 cotton pest control program or a reduction from LE 213.4 M. to LE 160.1 M., or LE 53.3 M. If the area planted to cotton in 1993 is approximately 900,000 feddans, the subsidy per feddan must be reduced by about LE 59 per feddan to meet the target in 1993.

Table 5.10 Costs of GOE cotton pest control program, (1990, 1991, and 1992 crop years).

Item	Units	1990	Crop year 1991	1992 1/
<b>Value of pesticides used:</b>				
Import cost 2/	US\$(000)	25,437.4	31,476.2	31,335.6
At official exch.rate	LE(000)	25,543.0	34,809.1	50,498.3
At market exch. rate 3/	"	64,063.9	80,729.1	91,446.6
<b>Indirect subsidy</b>	"	38,520.9	45,920.0	40,948.2
<b>Cotton pest control costs:4/</b>				
Chemical program	LE(000)	78,315.7	111,809.0	155,136.3
Manual program	"	57,969.3	24,277.4	24,698.9
Other(New machinery)	"			1,512.3
Administrative costs	"	3,675.1	6,190.3	9,121.1
Total	"	139,960.1	142,276.7	190,468.6
<b>Charges to cotton farmer</b>	"	23,239.1	17,834.6	18,002.3
<b>Direct subsidy</b>	"	116,721.1	124,442.1	172,466.3
<b>Total pest control prog. 5/</b>	"	178,481.0	188,196.7	231,416.8
<b>Total subsidy:</b>	"	155,242.0	170,362.1	213,414.5
<b>Area of cotton</b>	FD	993.047	851,283	840,267
<b>Costs per Feddan:</b>				
Total pest cont.prog.	LE/FD	179.7	221.0	275.4
Charge to farmer	"	23.4	20.9	21.4
Total subsidy	"	156.3	200.1	254.0
Indirect subsidy	"	38.8	53.9	48.7
Direct subsidy	"	117.5	146.2	205.3
<b>Total cotton production(000)Kentar</b>		5,169.0	5,051.1	6,006.3
<b>Costs per seed Kentar:</b>				
Total pest cont.prog.	LE/Kentar	34.5	37.2	38.5
Charge to farmer	"	4.5	3.5	3.0
Total subsidy	"	30.0	33.7	35.5
Indirect subsidy	"	7.5	9.1	6.8
Direct subsidy	"	22.5	24.6	28.7

1/ Production and cost data for 1992 crop year are preliminary.

2/ Data from MALR, Undersecretary for Pest Control

3/ Data from Egyptian Central Bank

4/ Data from Agricultural Price Stabilization fund.

5/ Including indirect subsidy.

### **Total costs, 1992**

When costs of the GOE pest control program of LE 275.40/FD are added to costs of farmers own pest control activities of LE 76.93, total pest control costs are estimated at LE 352.33 /FD. The cotton farmer pays the LE 76.93 plus LE 20.00 of charges or 28 percent of total costs and the balance of 72 percent is paid by the GOE.

### **Proposed Pest Control Program for 1993**

The GOE cotton pest control program for 1993 was designed to reduce subsidies far more than 25 percent through a reduction in program costs. The 1993 program included the following elements: a) continuation of the chemical control of boll worms through the use of 3 to 4 sprays as needed but a reduction in government cost by requiring farmers to pay for anything over two sprayings, b) a reduction in the dosage of chemicals used per spraying by 50 percent, and c) the use of phermone (male sex attractant) traps on 100,000 feddans.

This program was designed to continue shifting the burden of the pest control program unto the farmer which was began in 1991 and continued in 1992. The farmer in 1993 was to bear responsibility to control both early and late cotton pests including aphids and white flies and to bear the cost of all chemical programs needed on boll worms over and above the cost of two sprayings to be paid for by the GOE.

The reduction in dosage level of chemicals was considered to be technically possible through the addition of acetic acid to the carrier to increase the acidity of the insecticide. The reduction in number of sprayings, plus the decrease in dosage, was intended to reduce total chemical usage in 1993 to less than one half of the amount used in 1992.

No insecticides were to be used on land treated with phermones. The cost of the phermone program, per feddan, was expected to be equal to that of two boll worm sprayings, thus, the cost per feddan to the government was expected to be the same, and possibly much lower for the farmer if no spraying was required. These changes in the pest control program resulted in a significant reduction in environmental degradation from insecticides.

## **Preliminary Results of 1993 Pest control Program**

Due to political pressures, and the GOE attempts to lower cotton prices in 1993 to allow privatization of cotton marketing, the GOE found it impossible to charge farmers for the 3rd spraying as planned, thus, at the time of preparation of this report the only charge to the farmer anticipated for 1993 was LE 20/FD, the same as in 1993.

Preliminary estimates of costs of the 1993 program available at the time of the preparation of this report did not include costs for all the cotton produced in 1992 or 1993 since data on costs and production of cotton on some lands managed by MALR companies and agencies were not available. Also, data were not available to allow computation of the exchange rate subsidy but the decrease in this item is estimated to be greater than 25 percent since the supply of old pesticides is dwindling.

The preliminary data indicated that the total costs to the GOE of the chemical program in 1993 were LE 122.4 M. compared to a cost in 1992 of LE 149.7 M., a reduction of LE 27.3 M. or 18 percent. The costs of the manual program decreased from LE 23.1 M. in 1992 to LE 21.1 M. in 1993, a nine percent reduction. The area of cotton reported here was 802,618 feddans in 1992 and 843,966 feddans in 1993. Thus, the costs of both the manual and chemical programs totaled LE 215.3/FD in 1992 and LE 170/FD in 1993, a reduction of 21 percent in cost.

After applying the charges to the farmer of LE 20/FD in each year, the subsidy would be roughly LE 195/FD in 1993 and LE 150/FD in 1993 or a reduction in the subsidy per feddan of LE 45 or 23 percent. As stated above, data are not available to estimate the indirect subsidy and these estimates are preliminary.<sup>28</sup> Thus, a final determination cannot be made at this time as to whether the Benchmark was met but substantial progress was made toward completion of this Benchmark.

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Although the use of an official exchange rate to import pesticides was discontinued in 1991 some pesticide materials purchased under this program were used in 1993 for cotton pests control. Data on these quantities will not be available for several months. The indirect subsidy on the 1992 crop was LE 41 M. which is expected to decline sharply in 1993 (by more than 25 percent) as these materials are running out. The computation of the indirect subsidy essentially adjusts the LE cost for the low exchange rate.

## Conclusions

- The new system of charges to farmers for pest control initiated in 1991 is gradually shifting the pest control costs and operations to the producer. Farmers in 1992 incurred greater charges under the government pest control program and also spent more on their own pest control programs than in 1991.
- Survey results indicate that most cotton producers prefer to operate their own pest control program independent of the government, but the same survey also shows that less than half of the producers felt confident that they could operate such a program themselves. Many producers do not know what chemicals to use, or where they could obtain the needed chemicals or equipment. GOE needs to expand its educational program on cotton pest control before it can safely and completely withdraw its supervision of the program.
- The total costs of the governmental pest control program rose substantially in 1992 primarily due to inflation in costs of application. The total subsidy increased from LE 200/FD in 1991 to LE 254/FD in 1992.
- Farmers paid approximately 28 percent of total cotton pest control costs in 1992.
- The pest control program designed for 1993 was expected to reduce costs through a reduction in the rates of use of chemicals, through substitution of pheromones for chemicals on some cotton, and by passing on more costs to the farmer. Preliminary data indicate a 23 percent reduction in 1993 in the subsidy per feddan of cotton.
- **Thus, substantial progress was made in shifting costs and pest control operations to the farmer and in attainment of this Benchmark.**

## BENCHMARK NO. 6

### MARKETING OF FARM INPUTS

#### Introduction

PBDAC was until recently, the sole supplier of fertilizer and a major supplier of agricultural seeds and livestock feeds. This distribution function is being gradually, but rapidly, privatized. Benchmarks for fertilizer have been expressed in terms of quantities of domestic factory output which PBDAC was permitted to receive and distribute.

**Benchmark:** "The MALR will adjust marketing policies for farm inputs so as to reduce the quantities of commercial farm inputs marketed by the public sector using the following guidelines.

- a. Private sector dealers will be permitted to trade and transport all farm inputs except cotton seed for planting.
- b. By the end of FY 1992/93, all fertilizer dealers (PBDAC, cooperatives, and other private dealers) will have access on competitive terms to imported and locally produced fertilizers. Local factories' annual sales of fertilizer to PBDAC will not exceed the following amounts:
  - 3.0 million tons of nitrogen (15.5 percent nutrient content),
  - 0.5 million tons of phosphate (15 percent nutrient content).
- c. By the end of calendar year (CY) 1992, public sector distribution of low priced 'unified' livestock feed will be discontinued.
- d. By the end of CY 1992, imports and marketing of corn by PBDAC will be eliminated."

## SURVEY RESULTS

### Surveys of Distributors (Factory Agents)

The termination of subsidies on all domestically produced fertilizers in July, 1991 signaled the major push toward privatization of fertilizer distribution in Egypt. As long as PBDAC could sell subsidized fertilizer at a price below that charged by the private sector PBDAC was guaranteed a major share of the market. But when these subsidies disappeared in July 1991 several fertilizer factories in Egypt signed contracts with a number of firms who agreed to purchase specified minimum quantities of fertilizer on a monthly basis at specified prices. These firms were called "Factory Agents" but these firms are not agents for the factories but operate for their own gain. These firms sell to wholesalers, retailers, and some sell directly to farmers. In this report these firms are called distributors.

In FY 1991/92 five domestic fertilizer factories signed a total of 76 contracts of this type. Some firms had signed contracts with more than one factory so the total number of firms, or distributors was much less than 76, possibly about 30 to 40. Many of these firms found that selling fertilizer was less profitable than expected, thus, the number of contracts signed in FY 1992/93 dropped to 39. The total number of such firms is now estimated at 20 or less.<sup>29</sup>

Two surveys of these firms were conducted to determine their operating margins, their sources of fertilizer, sales outlets and terms of contracts.<sup>30</sup> The first survey, conducted during November, 1992 covered the summer 1992 cropping season. A second survey during Feb.- March 1993 covered the winter 1992-93 cropping season. Similar surveys of input merchants, or dealers, were conducted at the same time and will be summarized below.

Details obtained from these two surveys are presented in Annex III (Tables 3.1-3.4). The survey for the summer 1992 season included a sample of 18 distributors who handled an average of about 8,500 tons. They purchased 93 percent of this fertilizer

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For a discussion of these distributors, see sections 6.2 and 7.2 of the IFDC fertilizer report cited in Chapter III.

English translations of the questionnaires, instructions for enumerators and data codes for the surveys of distributors and merchants are available in Annex IX. Annex X lists the data files obtained from these surveys.



from factories and the balance from other distributors or from EAO but none was imported.<sup>31</sup>

These distributors sold 93 percent of their fertilizer to merchants or other distributors and seven percent direct to farmers. In the winter of 1992-93, ten distributors reported handling from 1,500 to 20,900 tons an average of 9,700 tons, of which 95 percent was purchased from factories and the balance from other distributors. EAO was no longer reported as a supplier of these firms. These ten firms reported selling 87 percent of their fertilizer to merchants and the balance direct to farmers. Thus, the average annual volume of these firms is about 18,000 tons.

For the country as a whole, distributors handled about 40 percent of the fertilizer going to fertilizer merchants in the 1992 summer season but about 60 percent by the 1992/93 winter season. These distributors are definitely emerging as the first step between the factories and the farmer.

The gross marketing margins of these companies was about five percent in both seasons. A discussion of marketing margins was provided in Chapter III.

Most of these firms have contracts with factories which require that they purchase a minimum tonnage per month. The minimum tonnage varies widely between distributors. In exchange for this minimum purchase, the distributor receives a discount below the regular ex-factory price of about two percent. The factories are willing to pay this small discount to assure a certain market as the factories have very little in terms of storage facilities.

The ten firms interviewed dealt exclusively with urea, AN and SSP. None of these 10 firms handled any other types of fertilizer. Thus, merchants must generally go directly to the factories, or look to EAO, co-operatives, or imports, to obtain supplies of other types of fertilizer.

### **Surveys of merchants, (purchases)**

Surveys of private sector merchants were conducted to determine their sources of fertilizer and their margins. The sample was

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The Egyptian Agricultural Organization (EAO) is a parastatal non-profit organization which conducts a variety of activities for the benefit of agriculture, primarily the importation of vegetable seeds and livestock breeding stock. In 1990 it was given permission to lift fertilizer from domestic factories and distribute it to cooperatives. The EAO retained a 2 percent commission for this activity. This activity was one of the first steps in the privatization of fertilizer distribution in Egypt.

drawn primarily from a list of licensed merchants as of Sept. 1992. It is important to note that there are many fertilizer merchants without licenses. The unlicensed dealer cannot buy fertilizer from the factory nor can he obtain a loan from a commercial bank, but otherwise they are currently allowed to operate (they are not considered legal but are not vigorously prosecuted). This group represents many of those called "others" who purchase fertilizer from the licensed merchants.<sup>32</sup>

Based on these survey data, the average merchant in Upper Egypt purchased 758 tons for the summer 1992 season and 1,095 tons in the winter season. The average merchant in Middle Egypt purchased 1,156 tons in the summer and 865 tons in the winter. The average merchant in Lower Egypt purchased 534 tons in the summer season and 319 in the winter. For the entire country the average volumes were 718 tons in the summer and 638 in the winter for a total of 1,356 for the year. The smaller average volumes in Lower Egypt imply more competition in this region. Data in Table 6.1 describe the sources of fertilizer as reported by the sample merchants. The two major sources of fertilizer are factories and distributors. Factories were the major source in the summer 1992 season but distributors had become the major source by the winter 1992/93 season. EAO was an important source in Upper Egypt in the summer of 1992 but its share of the market declined considerably in all regions by the winter season. "All other" sources includes mainly co-operatives and other merchants. This source also declined between the two seasons.

Changes in Middle Egypt appear to differ from that of the other regions but this may be a temporary phenomena or due to too small of a sample. These changes need further verification in coming seasons to separate season differences from secular trends.

These data show very little trading of types of fertilizer other than the three major types. In the summer season only two dealers in Upper Egypt and two dealers in Middle Egypt sold any other type of fertilizer besides the three major types. In Lower Egypt, 21 of the 52 sample merchants sold either CN or AS fertilizer. Thus, during the summer 1992 season, only 27 percent of the merchants sold any type besides the three major types.

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Unlicensed merchants were not studied primarily due to a lack of a sample list, however, many in this group would possibly be reluctant to cooperate in the survey for fear of official actions against them.

Table 6.1 Sources of fertilizer reported by merchants.

Region	Source of fertilizer:			
	Distributors	Factories	EAO	All Other
<b>Summer season 1992</b> (Percent)				
Upper Egypt	26	36	28	10
Middle Egypt	54	35	8	3
Lower Egypt	36	57	1	6
Total sample	40	44	10	6
<b>Winter season, 1992-93</b>				
Upper Egypt	64	21	12	3
Middle Egypt	23	69	5	3
Lower Egypt	60	39	*	2
Total sample	49	42	6	3

Source: Field surveys, see Annex 3.

\* Less than 1 percent.

In the winter season in Upper Egypt, six of the 22 merchants dealt with other types of fertilizer. In Middle Egypt only two of the 24 merchants sold other types of fertilizer and in Lower Egypt only five of the 49 merchants dealt in other types of fertilizer or only 14 percent of the merchants. During the winter season the three major types of fertilizer made up 97.3 percent of total merchant sales,

#### **Surveys of merchants, (sales)**

Merchants throughout Egypt sell fertilizer both to farmers and to other merchants. Many of these "other merchants" are the unlicensed merchants mentioned earlier. Sales to farmers represented 90 percent of total sales in the 1992 summer survey but has dropped to 73 percent in the 1992/93 season. This probably indicates that more unlicensed dealers have entered the fertilizer business. This decline in the percentage of sales to farmers occurred for all three major types of fertilizer.

The sales data (Tables 6.2 and 6.3) indicate that the merchants margin, or difference between purchase price and sales price to farmers during the summer 1992 season averaged slightly over three percent for the two major nitrogen fertilizers and about 5.8 percent for SSP. A higher percentage margin is to be expected with the cheaper value item since transportation, labor, and storage costs are the same for a LE 10 sack of SSP as for a LE 20 sack of AN or LE 23 sack of urea.

Table 6.2. Fertilizer sales by merchants, total sample, three major types of fertilizer, summer season, 1992.

Type of Fertilizer	Percent of Sales	Purchase Price	Sales Price	Margin	
<b>Urea</b>		(LE/ton)	(LE/ton)	(LE/ton)	(Percent)
To Farmers	89	456.15	471.02	14.88	3.2
To Others	11	449.36	463.59	14.11	3.2
Total	100	455.39	470.19	14.80	3.2
<b>AN</b>					
To Farmers	93	377.25	390.12	12.87	3.4
To Others	7	377.08	385.68	8.60	2.3
Total	100	377.24	389.80	12.56	3.3
<b>SSP</b>					
To Farmers	89	188.21	199.13	10.92	5.8
To Others	11	188.21	196.36	8.15	4.3
Total	100	188.21	198.83	10.62	5.6
<b>Three types</b>					
To Farmers	90	---	---	13.34	3.6
To Others	10	---	---	11.38	3.1
Total	100	---	---	13.14	3.55

Source: Field survey, Oct.- Nov. 1992.

Table 6.3. Fertilizer sales by merchants, total sample, three major types of fertilizer, winter season, 1992/93.

Type of Fertilizer	Percent of Sales	Purchase Price	Sales Price	Margin	
<b>Urea</b>		(LE/ton)	(LE/ton)	(LE/ton)	(Percent)
To Farmers	74	468.70	484.78	16.08	3.4
To Others	26	458.07	467.73	9.66	2.1
Total	100	465.94	480.35	14.41	3.1
<b>AN</b>					
To Farmers	76	390.55	403.33	12.78	3.3
To Others	24	381.11	389.72	8.61	2.3
Total	100	388.28	400.06	11.78	3.0
<b>SSP</b>					
To Farmers	68	193.33	203.43	10.10	5.2
To Others	32	189.69	198.04	8.35	4.4
Total	100	192.16	201.68	9.52	5.0
<b>Three types</b>					
To Farmers	73	---	---	13.32	3.6
To Others	27	---	---	8.90	2.6
Total	100	---	---	12.11	3.4

Source: Field survey, Feb.- March, 1993.

## Survey of farmers

Two surveys were made of 500 farmers each to obtain information regarding their experiences in input purchases. In terms of this Benchmark, no evidence was found of government interference in private sector trade in farm inputs. The privatization of the distribution of fertilizer has proceeded rapidly since it began in 1991. These data (Table 6.4) show that the private sector increased its share of the fertilizer market from 30 percent in the summer season 1992 to 53 percent in the winter season 1992-93. This is a very significant change in a short period of time. Some of this difference may be a seasonal effect but the private sector is expected to gain a larger share of the market in upcoming seasons.

But privatization has proceeded uneven geographically. The data in Table 6.5 indicate that the average percent of sales by the private sector is similar in all regions of Egypt but drastically different between neighboring governorates, varying from lows of 11 percent up to highs of 84 percent.<sup>33</sup> These differences are likely the result of differences in local private sector marketing efforts and not the result of GOE policies.

Table 6.4. Market share of fertilizer sales to farmers by private sector merchants, 1992-93.

Three major Types of fertilizer	Summer season 1992	Winter season 1992-93
Urea	35	57
AN	25	47
SSP	24	54
Total	30	53

Source: Field surveys, Oct.-Nov. 1992 and Jan.- March, 1993.

On the other hand, judging from the percent of farmers in each governorate that have purchased some fertilizer from the private sector, privatization is proceeding rather uniformly throughout the country. The differences in these two sets of percentages in Table 6.5 perhaps explain farmers response to questions about satisfaction with input suppliers. Data in Annex IV, Tables 4.5 and 4.6 indicate that farmers' main concerns about input suppliers were the availability of inputs and uncertain prices.

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Some these differences between governorates may be due to the random choice of the sample of farmers, but this still indicates large geographical differences.

Apparently, farmers are often not able to find the inputs they want from the supplier of their choice.

One concern about privatization is the availability of some of the minor types of fertilizer such as CN, AS, CSP or KS. Survey data (Annex IV, Table 4.4) indicated that farmers made a high percent of the purchases of these minor types from the public sector during the summer of 1992 but these same types of fertilizer were available from private sector merchants by the winter of 1992-93.

### **Farmers preferred source of inputs**

Despite the large market share captured by the private sector, and the high percent of farmers who have dealt with the private sector, the private sector has not won the confidence of the farmer (Annex Table 4.5 and 4.6) and is not the preferred source of inputs. In the summer 1992 season the private merchant was voted last choice behind co-ops and PBDAC. In the winter 1992-93 season, with the strong takeover of the fertilizer market, private merchants as a group had moved into second place as the preferred source of inputs, still behind the co-operatives. As stated above, problems of availability of desired inputs were stated as a major factor affecting farmers preference and many farmers would prefer fixed prices to negotiated prices.<sup>34</sup>

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Earlier we indicated that most merchants have some storage but not large amounts. Perhaps more storage is needed to maintain constant supplies of fertilizer on hand.

Table 6.5. Sales of three major types of fertilizer to farmers by private sector, winter season 1992-93. 1/

Governorates and Regions	Percent of sales	Percent of farmers
Assuit	77	72
Aswan	11	50
Sohag	64	73
Qena	33	55
Upper Egypt	58	67
Beni Suef	84	68
Fayoum	66	64
Giza	39	81
Minya	19	50
Middle Egypt	48	62
Alexandria	30	56
Behira	75	76
Daqahliya	39	65
Damietta	69	64
Gharbiya	53	73
Ismailia	34	56
Kafr El Sheikh	48	76
Menifiya	32	35
Qalubiya	35	36
Sharquia	66	78
Lower Egypt	55	67
Entire Republic	53	66

Source: Field survey of farmers, Jan.- March, 1993.

1/ Based on sales of urea, AN and SSP.

## Seeds

In both surveys, farmers were also asked to report on purchases of seeds. The private sector is currently providing a major share of some types of seeds, particularly vegetables. A small percent of the farmers report problems obtaining seeds of their choice with choice of variety being the main problem.

## Licensing of fertilizer dealers

The MALR has in place a system of licensing of merchants of agricultural inputs. The requirements for a fertilizer license has three components; a business registration and taxation number, a technical personnel requirement, and a storage inspection and approval requirement. The personnel requirement

is that a member of the Agricultural Engineers Union must be the executive manager of the firm. Another regulation includes a requirement that the fertilizer storage building be located at least 50 meters from any residential housing. This requirement is difficult to meet in the typical Egyptian village. Also, all storage space must be registered on the license application to permit inspection.

Nine percent of the merchants interviewed in the summer season survey and 38 percent interviewed in the winter season survey reported difficulties in obtaining licenses. But this sample consisted primarily of licensed dealers, those whose applications had been approved. It was not a cross section of all applicants. The two license requirements listed above are the two items that are most mentioned as problem areas by those who have had difficulties obtaining licenses. As a result, there are estimates of 5 to 10 unlicensed dealers operating for every licensed fertilizer dealer.

No attempts were made to interview unlicensed dealers. Ten unlicensed merchants were included in the winter survey through sampling at the governorate level. It is strongly suspected that many of these merchants would not fully report their operations because they fear taxation and fines if they divulge their operations. Thus, we did not, and suspect we could not quantify the activities of these unlicensed merchants. They cannot obtain fertilizer from factories and cannot borrow money from banks for their operations but they can buy fertilizers from licensed merchants or distributors and we suspect that they represent the final step in the distribution chain with the farmer often providing the delivery of the fertilizer to the farmers location.

The results of the surveys of merchants indicated a sizable fraction of the fertilizer sales are to other merchants which no doubt are unlicensed merchants (Annex Tables 3.14 and 3.33). If one multiplies the number of licensed merchants reported in Table 6.6 by 5 or 10, one would see that there is a large number of merchants dealing in fertilizer in Egypt. The regional distribution of licensed dealers is very similar to the regional distribution of crop land with about one licensed merchant for every 5,700 feddans of crop land in all regions by June 1993.

As part of the storage inspection requirement, all fertilizer storage places must be listed in the application for the dealers license. Thus, when merchants placed fertilizer in warehouse space rented from PBDAC, which was not listed on their license, they were technically in violation of their license. Some merchants have complained that police have tried to revoke licenses on this basis.



Table 6.6. Number of license holders for trading  
in fertilizer and insecticides.

Governorate	No. of licenses holders as of:			
	June, 1992	Sept. 1992	Dec. 1992	June 1993
Alexandria	18	20	20	20
Assuit	16	18	18	22
Aswan	6	29	37	50
Behira	23	27	30	46
Beni Suef	33	38	40	52
Daqahliya	89	104	112	120
Damietta	3	7	8	10
El Arish	3	3	3	3
Fayoum	7	10	12	13
Gharbiya	66	70	75	90
Giza	53	55	63	68
Ismailia	23	27	31	35
Kafr El Sheikh	26	31	35	37
Menofiya	46	59	72	97
Minya	32	42	53	70
Qalubiya	65	77	83	90
Qena	40	69	84	110
Sharqiya	45	49	50	56
Sohag	13	15	20	26
Cairo	38	41	44	44
Suez	1	1	2	5
Upper Egypt	75	131	159	208
Middle Egypt	125	145	166	203
Lower Egypt	446	516	565	648
Total	646	792	892	1059

Source: MALR

Efforts are currently underway by PBDAC to amend the licensing requirements to allow merchants to store fertilizer in space rented from PBDAC without violating their license and to eliminate the requirement for an agricultural engineer (Figure 6.1, Annex V). The topic of dealer licensing is discussed thoroughly in the IFDC report (See Sections 7.10.1 and 15.6). This report argues that the licensing requirements should be simplified to allow more merchants to obtain a license and thus encourage competition.

The number of licensed fertilizer dealers in Egypt continues to increase. As of June 30 1993, the number had risen to 1,059, a 64 percent increase over a year earlier. This indicates that current restrictions on licensing of dealers are not seriously effecting competition.

## PBDAC's share of factory output

The second amendment to the MOU for the APC policy reform program includes benchmarks for maximum deliveries of nitrogen and phosphate fertilizers from domestic factories to PBDAC. These targets are intended to shift fertilizer distribution to the private sector.

For FY 1991/92 the targeted total deliveries to PBDAC were a maximum of 4.0 million (M.)tons of nitrogen and 1.0 M. tons of phosphates.<sup>35</sup> The data (Table 6.7) show that total domestic factory output in FY 91/92 was of 5.16 M. tons of nitrogen (CN equivalent) and 0.95 M. tons of phosphate (SSP equivalent). Thus, the target was to limit distribution to PBDAC of a maximum of 77.5 percent of nitrogen output. Expected output of phosphates was 1.2 to 1.3 M. tons of SSP equivalent but output of phosphates declined in FY 91/92 as a response to declining sales, which in turn was a result of increased prices.

Table 6.7. Domestic factory production and distribution of fertilizers, FY 1991/92.

Factory and Type of fertilizer	Production	Distribution to:		
		PBDAC	Exports	Private sector 1/
<b>Nitrogen</b>		(Metric Tons)		
Urea(46%)	873,844	355,185	154,732	363,927
AN (33.5%)	1,119,259	621,609	167,248	330,402
AS (20.6%)	67,073	62,465	---	4,608
CN (15.5%)	212,000	180,064	---	31,936
Total Nitrogen Equiv.(15.5%)	5,161,478	2,572,122	798,692	1,790,663
Percent of factory production	100	49.9	15.5	34.6
<b>Phosphate</b>				
SSP (15%)	825,590	516,800	5,124	303,666
CSP (37%)	49,915	16,688	---	33,227
Total Phosphate Equiv.(15%)	950,378	558,520	5,124	386,734
Percent of factory production	100	58.8	0.5	40.7

Source: PBDAC 1/ Estimated as a residual, (total production less deliveries to PBDAC and exports). This estimate implies no change in factory inventories.

Actual factory deliveries to PBDAC in FY 91/92 were 2.57 M.

The Benchmark targets were specified in tons of 15.5 % nitrogen (CN) and 15 % phosphate (SSP). For simplicity, one ton of urea = 3 tons of CN, one ton of AN = 2 tons of CN, one ton of AS = 1.333 tons of CN, and one ton of CSP = 2.5 tons of SSP.

tons of nitrogen (15.5%) and 0.56 M. tons of phosphates (15%). This was only 50 percent of factory output of nitrogen and 59 percent of phosphate output and well below the Benchmark targets.

The benchmarks for FY 1992/93 were set at 3.0 M. tons of CN equivalent and 0.5 M. tons of SSP equivalent. Expected factory output in FY 92/93 was 5.53 M. tons of nitrogen and 0.92 M. tons of phosphate. Thus, the targets represented 54 percent of the expected output of nitrogen and 54 percent of the output of the phosphate output.

Data on factory production and deliveries to PBDAC for the first 8 months of FY 1992-93 (Table 6.8) clearly indicate that the distribution targets were far exceeded.<sup>36</sup> These data indicate that PBDAC received a very small fraction of domestic output during FY 1992/93.

Table 6.8. Domestic factory production and distribution of fertilizers, July 1, 1992 - Feb 28, 1993.

Factory and Type of fertilizer	Production	PBDAC	Distribution to: Exports	Private sector
<b>Nitrogen</b> (Metric Tons)				
Urea(46%)	552,513	---	70,282	482,231
AN (33.5%)	873,493	56,282	173,455	643,756
AS (20.6%)	37,600	4,074	---	33,526
CN (15.5%)	59,836	7,730	60	52,046
Total Nitrogen Equiv.(15.5%)	3,654,128	134,717	585,569	2,933,842
Percent of factory production	100	3.7	16.0	80.3
<b>Phosphate</b>				
SSP (15%)	435,799	8,306	---	427,493
CSP (37%)	38,577	---	---	38,577
Total Phosphate Equiv.(15%)	532,241	8,306	---	523,935
Percent of factory production	100	1.6	---	98.4

Source: PBDAC for deliveries to PBDAC and Chemical and Industrial holding company for data on factory output and exports.

Data on factory output by type of fertilizer were not obtained for the entire FY 92/92 due to the fact that control of the fertilizer factories was divided among three holding companies during the year and personal contacts to obtain data from two holding companies have not been established as yet,

Data obtained from PBDAC for the entire FY 1992/93 included the quantities reported in Table 6.8 plus an additional 15,280 tons of urea and 64,288 tons of AN during the last 4 months of the fiscal year (Table 6.9). Based on these data, factory deliveries to PBDAC of CN equivalent nitrogen (15.5%) in FY 1992/93 was 319,000 tons, which is only 11 percent of the Benchmark of 3.0 M. tons. And, total tonnage of SSP equivalent (15%) delivered to PBDAC was only 8,300 tons which is also far below the benchmark of 0.5 M. tons.

Table 6.9. Deliveries of fertilizer to PBDAC  
by domestic factories, FY 1992/93.

	Actual fertilizer	CN Equivalent
<b>Nitrogen</b>	(Metric Tons)	
Urea(46%)	15,280	45,347
AN (33.5%)	120,570	260,587
AS (20.6%)	4,074	5,388
CN (15.5%)	7,730	7,730
Total Nitrogen Equiv.(15.5%)		319,052
<b>Phosphate</b>		
SSP (15%)	8,306	---

The data summary presented in Tables 6.10 and 6.11 dramatically illustrate the change that has occurred in the last two years in fertilizer distribution in Egypt.

Table 6.10. Recent trend in deliveries of domestic  
fertilizer factory output to PBDAC.

Fiscal year	Nitrogen (15.5 %)	Phosphate (15%)
	(Percent of factory output)	
1990/91	80.6	87.2
1991/92	49.9	58.8
1992/93	5.2	2.2

Table 6.11. Distribution of domestic fertilizer factory output.

Six months ending on:	Percent of factory output distributed to:		
	PBDAC	Private & Co-ops	Exports
Dec. 31, 1990	90.6	9.4	---
Dec. 31, 1991 1/	66.3	27.1	5.5
Feb. 28, 1993 2/	3.8	84.0	12.2

1/1.1 % went into inventory. 2/First eight months of FY 1992/93.

### Distribution of unified feed

For many years, PBDAC was the major GOE agency for distribution of subsidized "unified" or "traditional" animal feeds. Table 6.12 provides data on feed distribution by PBDAC in recent years. As indicated in Chapter 4, subsidies on animal feeds were discontinued in December, 1992. Total distribution of feeds by PBDAC had begun to decline before the discontinuance of feed subsidies but has fallen dramatically since these subsidies were stopped. Clearly, PBDAC is gradually moving out of feed distribution as it eliminates its inventories.

Table 6.12. Quantities of animal feed distributed by PBDAC, FY 90-91 to FY 92-93.

Year and Quarter	Subsidized feed	Un-subsidized feed	Total
<b>FY 1990-91</b>	(000 Metric Tons)		
1st quarter	131.3	102.8	234.1
2nd quarter	210.6	50.8	261.4
3rd quarter	177.4	45.0	222.4
4th quarter 1/	NA	NA	192.1
Total			910.0
<b>FY 1991-92</b>			
1st quarter	182.5	24.9	207.4
2nd quarter	170.0	20.7	190.7
3rd quarter	16.3	19.4	35.7
4th quarter 1/	NA	NA	22.6
Total			456.4
<b>FY 1992-93</b>			
1st quarter	---	---	15.9
2nd quarter	---	---	14.6
3rd quarter	---	---	10.5 2/
4th quarter	---	---	11.3
Total	---	---	52.2

Source: PBDAC

1/ Data available by type of feed for only first 3 quarters.

2/ Sales of unified feed continued after December 1992 to eliminate inventories.

## **Imports of yellow corn**

PBDAC discontinued the importation of yellow corn in January, 1992. Since that date PBDAC has assisted private sector dealers in the arrangements for transportation, storage, bagging and financing. All of these activities have been without subsidies and at regular commercial rates and terms.

Interviews with several private sector corn importers failed to reveal any indication of GOE activity in the corn imports market or any complaints from the private sector of GOE interference or undue regulation of corn imports.

## **Conclusions**

- Private sector fertilizer distributors and merchants have rapidly expanded their share of the fertilizer market. GOE interference is minimal, causing concern only in regard to the licensing of merchants. A large number of unlicensed merchants are operating and providing distribution services to farmers.
- PBDAC received deliveries of only 319,000 tons of 15.5 percent nitrogen and 8,300 tons of 15 percent phosphate from domestic factories in FY 92/93, well below the target amounts of 3.0 million tons of nitrogen and 0.5 million tons of phosphate. **Thus, PBDAC has reduced its role in the distribution of fertilizer at a much faster rate than required by the reform Benchmark.**
- PBDAC is discontinuing feed distribution as it eliminates its inventories.
- PBDAC discontinued the importation of yellow corn in January, 1992.
- **Thus, MALR reforms in the area of inputs distribution succeeded in producing more rapid change than was required by this Benchmark.**

## **BENCHMARK NO. 7**

### **SUBSIDIZATION OF FARM CREDIT**

#### **Introduction**

The bulk of the subsidy on agricultural loans is on crop production loans. The total GOE budget subsidy on interest has been reduced substantially in recent years by reducing the number of crops eligible for subsidized loans, by limiting the amount of loan per feddan that is subsidized, and by reductions in the share of the interest that is borne by the GOE.

**Benchmark:** "The system for subsidized farm credit for crop production will be reviewed by PBDAC with the intention of concentrating the benefits on farmers who bear the burden of producing low-priced, government-controlled crops or who are undertaking new activities that need promotion. FY 1992/93 interest subsidies on agricultural loans will not exceed the level of LE 100 million per year."

#### **DECREES AND OFFICIAL ANNOUNCEMENTS**

##### **Interest rates and rates of subsidy**

PBDAC Circular 157 lists the interest rates charged by PBDAC by type of loan and the rates of interest subsidy for the period from Oct. 1, 1992 to Feb. 28, 1993 (Figure 7.1 Annex VI). Part Two of this Circular specifies interest rates on crop production loans ranging from 16 to 18 percent. Circular 157 fixes the interest rate on subsidized crop production loans at PT. 0.85/LE per month, or an annual interest rate of 10.2 percent. Thus, the subsidy rate on crop production loans during that period was QA5.8 percent.

Circular 157 sets the interest rate on non-subsidized loans for land reclamation and irrigation improvements at 19.1 percent whereas the rate for subsidized loans is 10.1 percent, and, thus, a subsidy on interest of 9 percent.

PBDAC Circular 297 provides similar information for the period from March 30 to June 30, 1993 (Figure 7.2, Annex VI). Interest rate reductions announced in both of these Circulars have been possible as a result of declines in the general rate of inflation and a reduced interest rate at the Central Bank of Egypt. Circular 297 reduces interest rates by 1 to 1.5 percent but leaves the subsidies on interest at 6 percent for crop production

loans and 9 percent for land reclamation and irrigation improvement loans.

### **Concentration of loans on controlled and promoted crops**

PBDAC Circular 157 also specifies in Part Three that subsidized interest loans will be limited to cotton, sugar cane, sugar beets, sunflower and soyabean crops beginning Oct. 1, 1992 (FY 1992-93). Part Three also specifies the maximum subsidized loan per feddan for these crop production loans. These limits (Table 7.3) were not changed by Circular 297.

### **Trends in Loans by PBDAC**

Table 7.1 presents data on the volume of loans made by the PBDAC during four recent fiscal years. Crop production loans are made specifically by crop. Investment loans are made for purposes of mechanization, land reclamation, improvements in irrigation systems, or as food security loans and for different durations. Short-term loans are less than one year, medium-term loans are 1-3 years and long-term loans are more than three years.

These data indicate that total agricultural loans of all types increased by 16 percent between FY 89/90 and FY 90/91 but less than 3 percent between FY 90/91 and FY 91/92. These increases are small when compared to inflation, in fact when considering inflation these data indicate a reduction in loans in real terms.

Crop production loans constitute the bulk of the subsidized loans, accounting for 83 to 89 percent of the value of all subsidized loans in the first three fiscal years but declining to 73 percent in FY 91/92. This decline resulted from a slight decline in subsidized investment loans but a very large shift in crop production loans from the subsidized to the non-subsidized category between FY 90/91 and FY 91/92. Crop production loans constituted 33 to 35 percent of the total PBDAC agricultural loan portfolio in all of the fiscal years included.

Investment loans constitute the bulk of the non-subsidized loans comprising 86 to 89 percent in the first three fiscal years but only 70 percent in FY 91/92 as a result of the shift of LE 800 million in crop production loans from the subsidized category to the non-subsidized category.

### **Trends in Interest Rates**

Table 7.2 traces the changes in interest rates charged by the PBDAC on all types of agricultural loans during the past several years. This table reports interest rates according to the dates of release of PBDAC Circulars which do not usually coincide with fiscal years.



Table 7.1. Agricultural loans by the PBDAC,  
(FY 88/89 to 91/92).

Type of loan	Subsidized		Non-subsidized		All loans	
	Million LE	Per-cent	Million LE	Per-cent	Million LE	Per-cent
<u>FY 1988/89</u>						
Crop production:	748.2	83	227.3	11	975.5	33
Investment loans:						
Short-term	57.3	6	1406.6	67	1463.9	49
Medium-term	88.0	10	459.5	22	547.5	18
Long-term	5.9	1	0.2	1/	6.1	1/
Total	899.4	100	2093.6	100	2993.0	100
<u>FY 1989/90</u>						
Crop production:	960.3	86	313.5	12	1273.8	34
Investment loans:						
Short-term	14.9	1	1520.0	57	1534.8	41
Medium-term	127.6	11	828.5	31	956.2	25
Long-term	11.7	1	0.2	1/	11.9	1/
Total	1144.5	100	2662.1	100	3776.7	100
<u>FY 1990/91</u>						
Crop production:	1095.0	89	445.0	14	1545.0	35
Investment loans:						
Short-term	3.5	1/	1614.5	52	1618.0	37
Medium-term	109.8	9	1055.6	34	1165.4	27
Long-term	22.5	2	18.4	1/	40.9	1
Total	1230.8	100	3133.5	100	4364.3	100
<u>FY 1991/92</u>						
Crop production:	288.5	73	1277.9	30	1516.4	34
Investment loans:						
Short-term	3.9	1	1743.5	43	1747.4	39
Medium-term	75.3	19	1147.4	27	1192.7	27
Long-term	25.6	7	1.1	1/	26.7	1/
Total	393.3	100	4089.9	100	4483.2	100

Source: PBDAC

1/ less than 1 percent.

In addition to the interest rates described in Table 7.2, the PBDAC is allowed a commission or charge for administrative costs of one percent on all of these types of loans. Most of the food security loans were under the national veal project.

Interest subsidies are provided to PBDAC by the Ministry of Finance. Accounting of the subsidies with the Ministry of Finance is carried out on the basis of the differences between the subsidized and non-subsidized interest rates as given in Table 7.2.

It is clear from Tables 7.1 and 7.2 that some subsidization of interest has occurred with all four types of loans in past years but it is also clear that subsidies have been gradually declining. In FY 92/93 the only remaining subsidies on crop production loans are on summer crops and thus the rate of subsidy on these loans in FY 93/93 will be only 6 percent.

An important change (Circular No. 157) was that subsidies on mechanization and food security loans were discontinued in Oct. 1992. Thus, the only investment loans now receiving a subsidy are the land reclamation and irrigation improvement loans.

Table 7.2. Interest rates charged by PBDAC on agricultural loans.

Dates	Type of Loan							
	Crop		Mechan-		Food		Land	
	Production		ization		Security		Reclamation	
	Sub.	Full	Sub.	Full	Sub.	Full	Sub.	Full
	rate	rate	rate	rate	rate	rate	rate	rate
Percent								
4/87-5/89 1/	3	23	10	14-15	9	14-15	6	14-15
5/89-2/91 2/	5	15	12	16-17	11	16-17	8	16-17
2/91-7/91 3/	5	15	12	17	11	17	8	17
7/91-3/92 4/	10	16-18	15	20	14	20	11	20
3/92-10/92 5/	1.4	17.5-19.5	15.5	20.5	14.5	20.5	11.5	20.5
10/92-3/93 6/	0.2	16-18	(subsidies discontinued)				10.1	19.1
3/93-6/93 7/	9	15					9	18

Source: PBDAC

- 1/ Interest rates set on 23/4/87 at 13 % on loans less than 1 year, 14 % on loans of 1-2 years, and 15 % if over 2 years.
- 2/ Interest rates on new loans were raised by 2 % on 15/5/89.
- 3/ The full rate on crop production loans set generally at 15 % except fruit crops at 16 % and vegetable crops at 17 %.
- 4/ The full rate on crop production loans set at 16 % except fruit crops at 17 % and vegetables at 18 %.
- 5/ Full cost rates on crop production loans inc. 1 to 1.5 %.
- 6/ Full cost rates on crop loans decreased by 1 to 1.5 %. Subsidies on food security and mechanization loans were discontinued as of Oct. 1, 1992.
- 7/ Full cost rates on loans decreased by 1 to 1.5 percent.

## Total Subsidies

The total interest subsidy received by PBDAC in FY 1991/92 from the Ministry of Finance was LE 64.8 million. Of this amount, LE 18.4 million was for investment loans and LE 46.4 million was for crop production loans.

The estimated budget interest subsidy on crop production loans for FY 92/93 is presented in Table 7.3. These estimates are based on the specifications in Circular 297, or a subsidy of 6 percent. Interest on production loans for rice were subsidized in FY 91/92 but this crop is excluded from interest subsidies in FY 92/93. These estimates reflect the length of crop life and give a total estimated interest subsidy in FY 92/93 of LE 23.4 million or about half of the subsidy in FY 91/92.<sup>37</sup>

Based on the subsidy rate on investment loans of 9 points and the volume of loans described in Table 7.1, the total subsidy on investment loans in FY 92/93 is estimated at no more than LE 9 million giving a total interest subsidy for FY 92/93 of LE 32.4 million.

Table 7.3. Estimated budget interest subsidy on crop production loans, (FY 1992/93).

Strategic Crops	: Area of crop (000)FD.	: Loan Limit LE/FD	: Volume of Loans Million LE	: Length of loan months	: Amount of Subsidy Million LE
Cotton	840	300	252.0	8	10.08
Sugar Cane	267	650	173.55	14	12.15
Sugar Beets	38	200	7.6	8	.30
Oil Crops	104	200	20.8	8	.83
Totals			453.95		23.36

The estimate of interest on crop production loans included in the Tranche V report was LE 56.4 million. However, it was based on the assumption that all loans were for a full year. If the same methods had been used last year as were used here in Table 7.3, the estimate for FY 91/92 would have been LE 44.6 million.

## Conclusions

- o The volume of crop production loans on which interest is subsidized declined substantially in FY 92/93 due primarily to the elimination of rice as a subsidized crop.
- o For the crop year 1992/93, subsidized crop production loans were limited to 5 strategic crops and loan limits (LE/FD) were established for these crops. Interest subsidies on crop production loans in FY 92/93 were estimated at LE 23.4 M.
- o Interest subsidies on mechanization and food security loans were discontinued as of October, 1992 and the estimated maximum subsidy on investment loans in FY 92/93 is LE 9 M.
- o Total interest subsidies for all agricultural loans has declined from LE 92 M. in FY 90/91, to LE 64.8 M. in FY 91/92 and were estimated at LE 32.4 M. in FY 92/93 which is well below the agreed upon benchmark limit of LE 100 M.
- o **Thus, the GOE reforms far surpassed the Benchmarks established for interest subsidization.**

## BENCHMARK NO. 8

### PBDAC FINANCIAL CONDITION

#### Introduction

PBDAC has made substantial reforms during the past 3 years in reducing the quantities of agricultural inputs distributed. These reforms have resulted in large losses in revenues for PBDAC, in a huge redundancy of employees who were employed in these activities, and in an excess supply of storage facilities. Also, the PBDAC is now faced with finding new revenue sources and in defining its role in the agricultural finance arena.

**Benchmark:** "PBDAC will adopt measures to improve its financial condition, including:

- a. Prepare a phased implementation and financial plan acceptable to PBDAC and USAID by December 31, 1992 to substantially reduce redundancy of employees resulting from the divestiture of PBDAC input distribution activities. Upon the completion of the financial plan, initial steps will be taken no later than March 31, 1993 in executing the plan adopted to reduce redundancies of employees.
- b. The private sector will be allowed to rent PBDAC storage facilities. In addition, by the end of March, 1993 PBDAC will conduct a study and prepare a phased plan acceptable to both PBDAC and USAID to sell, rent or otherwise divest itself from the operation of storage warehouses, including the existing and the new planned facilities, except those justified for bank lending operations. Focus should be on facilities owned by PBDAC.
- c. The following requirements will be implemented:
  - use of the loan classification system called for by the Central Bank of Egypt (CBE) to define and write-off all loans classified un-recoverable;
  - an annual reconciliation of accounts receivable with GOE and negotiate to either: 1) collect the balances due, 2) accrue interest on balances due, or 3) write off the balances due."

## Redundancy of Employees

The first step toward the reduction in redundancy was a study conducted in early 1992.<sup>38</sup> A finding of this study was: "It is estimated that around 11,000 persons are directly engaged in non-banking activities and must therefore be laid off to the extent that divestiture takes place. Their wage cost is estimated at LE 70 million per annum. This is over and above the overall surplus labor characterizing the Bank in general."

A second step was a study of the impact on personnel of PBDAC's divestiture program which was completed in 1992.<sup>39</sup> This study evaluated several alternative voluntary severance packages. It reviewed the current benefits available to PBDAC employees, the magnitude of the redundancy problem, it prepared five alternative compensation packages, possible supplements to the compensation package, attitudes of affected employees, possibilities for transferring employees, and made recommendations for the severance package.

Next, a special staff paper entitled "PBDAC Voluntary Separation Program " was prepared by APCP staff and presented to PBDAC policy officials on Dec. 10, 1992. This paper outlined most of the substantive concepts involved in this topic and made recommendations on the subject. The paper identified sources of funding and suggested formula for estimating benefits and costs. This paper also proposed that PBDAC encourage some of its employees, especially those employed in the mandoubiyas, to enter the farm inputs trade and assist these new companies through the transfer of assets, loans, storage facilities and technical training. The paper also suggests the possibility of the use of land grants as partial compensation for early retirement.

On March 3, 1993 PBDAC officials issued Circular 8 of 1993 which described the early retirement program intended to reduce employee redundancy (Figure 8.1).<sup>40</sup> This plan was announced to

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"Divestiture Impact Study-Financial Impact of PBDAC's Divestiture of Non-Banking Activities", by Integrated Development Consultants. Feb, 1992, a contract study under the USAID funded Agricultural Production Credit Project.

"Study of the Personnel Impact of PBDAC Inputs Divestiture" by Integrated Development Consultants, July 1992, a contract study under the USAID funded Agricultural Production Credit Project.

Figures. 8.1 through 8.8 are English translations of the official plans and announcements regarding this Benchmark which are contained in Annex VII.

PBDAC employees on March 3, 1993 (Figure 8.2). The offer was made available to all PBDAC and BDAC employees less than 55 years of age and with five or more years of service. The plan offered a combination of benefits. This offer was open for applications until the end of March 1993. During March the deadline for applications was extended to April 15, 1993.

Circular 13 was issued on April 14, 1993 which further extended the deadline for applications to April 30 and described additional benefits for medical care and cash payments for unused regular vacation (Figure 8.3).

As of May 24, 1993 the number of applicants for the early retirement program had reached 1,415. These applicants were approved and these employees were separated on June 15, 1993. Also on May 24 it was announced that during 1992/93 normal attrition would reduce employees by 510, the number of contract employees was reduced by 594 and the reduction in employees under secondment was 9, for a total reduction during FY 1992/93 of 2,528 employees.

Figure 8.4 in Annex VII contains a letter of transmittal from PBDAC to USAID, and the consultancy report submitted by Dr. Peter Gregory which contains a plan for personnel reduction 1993-96. As indicated, the Bank committed itself to the goals specified in Scenario I which calls for voluntary separation of 6,000 employees by the end of FY 1994-95. The plan includes cost estimates for this reduction in employees, estimated savings and sources of funding.

### **Utilization of PBDAC Storage Facilities**

The successful privatization of agricultural inputs in Egypt also resulted in an excess capacity and under-utilization of warehouse space controlled by PBDAC. Table 8.1, describes the storage facilities in the PBDAC-BDAC warehouse system. These data indicate that the system includes 182,000 square meters (SM) of warehouse space (enclosed buildings of over 1,000 SM), 455,000 SM of stores (enclosed buildings of less than 1,000 SM), 164,000 SM of covered open sheds, and 3.5 million SM of shonas, (enclosed yards) for a total storage area of 4.6 million SM.

In September, 1992, PBDAC advertised the rental of its warehouse space (See Figure 8.5, Annex VII). As a result of this advertisement and other efforts, some warehouse space had been rented by January 1993 (See Table 8.2). These data show that the PBDAC-BDAC warehouse system, as of that date, was very poorly utilized.

The use of the available warehouse space by PBDAC and the BDAC had declined from an estimated 19 percent at the end of January 1993 to only 11 percent at the end of May, 1993. This reduction was the result of further divestiture of the inputs distribution activities (See Chapter 6). During this same period the rental (this page for Table 8.1, on PBDAC storage facilities) of such space to the private sector had increased from about 3.5 percent of available space to 5 percent. This is not a dramatic increase but indicates some progress.

A report on June 30, 1993 indicated that total rental to the private sector had declined slightly to 195,837 sq. meters. Hopefully this reduction represents a seasonal effect and not a long-term effect. Fertilizer storage by the private sector should be expected to vary seasonally in a pattern inverse to the pattern of utilization of fertilizer by farmers.

Table 8.2. Utilization of PBDAC and BDAC warehouse storage as of January 1993 as reported by 15 BDACs.

Utilization	Square Meters	Percent
Total available	3,124,170 1/	100.0
Currently in use by PBDAC or BDAC	590,988	19.0
Rented out	113,739	3.5
Unused	2,420,043	77.5

Source: Survey of BDACs.

1/ This represents 68 percent of the total PBDAC-BDAC warehouse space of 4.6 M. SM. Some BDACs and branches of PBDAC were not included here because they failed to submit accurate data on warehouse usage.

Table 8.3. Utilization of PBDAC and BDAC warehouse storage as of May 31, 1993, all BDAC's and PBDAC.

Utilization	Square Meters	Percent
Total net storage area available	4,124,170 1/	100.0
Currently in use by PBDAC or BDAC	467,527	11.3
Rented out	203,245	4.9
Unused	3,453,398	83.7

Source: Survey of BDACs and PBDAC.

1/ This quantity is less than the 4.6 million square meters described above but is defined as "storage area net after aisles and work space".

Surveys of fertilizer merchants produced some estimates of the availability and need for warehouse storage by private sector



fertilizer merchants.<sup>41</sup> These data (See Annex Tables 3.12 and 3.32) indicate that 97 percent of the sample merchants have storage space available to them but 3 percent operated with no storage. The bulk of this storage space, (70 % in the summer survey and 84 % in the winter survey) was owned by the merchant.

But in addition, none of the 92 merchants interviewed in the summer 1992 survey reported lack of storage space as a problem in their fertilizer marketing business. In a similar survey of 18 fertilizer distributors in the summer of 1992, two firms reported concern or problems with high costs of fertilizer storage but none reported a lack of fertilizer storage space.

Surveys in 1992 indicated that most fertilizer distributors had some space available for fertilizer storage but the amount equaled only about 11 percent of their season volume. All 10 distributors interviewed during a winter 1992/93 survey had storage space and it represented 40 percent of their season purchases. These survey results would indicate that private sector fertilizer dealers or distributors have very limited need for additional warehouse space.

#### **Feasibility study of PBDAC storage facilities**

Also in September, 1992, PBDAC advertised for tenders for a feasibility study of the future use or disposition of the PBDAC warehouse storage system (Figure 8.6). A letter of contract (Figure 8.7) was awarded in January, 1993 to El Maazawy Consultants.

The following is from Section III of the Request for Proposal. Subsection 2, "Phases of work" specifies the following deliverables:

"a - First Phase- Study Work Plan.

The contractor is required to submit a work plan within 12 working days of the contract start-up and a project review meeting will be held within 3 working days thereafter to review the contractor's Work Plan.

b - Second Phase- Financial Viability and Market Demand Assessment.

The contractor shall prepare a report on this phase within 25 working days after PBDAC's written approval of the contractors Work Plan (Phase 1). This report will be reviewed by PBDAC within 5 working days after receipt.

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English translations of survey questionnaires are included in Annex IX. Survey results are provided in Annex III.

c - Third Phase- Strategic Policy Recommendations.

"The contractor in this third phase shall determine in his best judgment what PBDAC should consider doing about its warehouse and storage system and offer expert opinions supported by the analysis of data acquired in Phases 1 and 2. The contractor shall then recommend policies and strategy which would serve PBDAC's best interests as a banking institution and also considering Egypt's national agricultural sector warehouse and storage needs. This shall include the contractor's estimates of Egypt's national needs for agricultural inputs and outputs warehouse and storage facilities for the next ten years following the initiation of this study. These estimates shall be related to the capacity and suitability of PBDAC's existing warehouse and storage system and the proposed 888 new warehouses. This information shall be presented so PBDAC can decide the most reasonable policies and make management decisions with respect to:

1 - Retaining or disposing of older not needed existing facilities. A list and spot map shall be prepared identifying each facility by location, size, storage capacity and type which are recommended to be retained and which disposed of (Rented facilities should be released first unless they are critically important to the over-all plan and the argument for retention of these is compelling.)

2 - Where disposition is recommended and these facilities are PBDAC owned, the contractor shall recommend what would be the best method and formula for evaluation, appraisal and most appropriate means for disposition.

The contractor shall prepare a report on this phase within 20 working days following submission of the second phase report. this report will be reviewed within 5 working days."

SECTION V of the Request for Proposal states "Performance shall begin on the effective date of the contract..."

Thus, the contract calls for completion of phase 1 and review by PBDAC by approximately Feb. 25. 1993. The deliverable under phase 2 should be completed by the contractor during March 1993, and the deliverable under phase 3 is to be completed by about April 15, 1993. Completion of phase 3 of the study will provide the plan required in this Benchmark."

El Maazawy Consultants presented their work plan as specified during March, 1993. This plan was approved by PBDAC and the contractor indicated the following modified schedule for its deliverables which was accepted by PBDAC:

2nd phase-Financial Viability Assessment.----- June 6, 1993  
3rd phase-Strategic Policy Recommendations.---- August 1, 1993

Final report-Operating/Management Plan.----- Sept. 12, 1993

In October, 1993, El Maazawy Consultants presented their third phase report to PBDAC on the warehouse study. In brief, the major findings of the report were:

1. Warehouse storage capacities far exceed projected needs up to the year 2003 in all but two governorates.

2. The total system cannot generate sufficient revenues to cover operating expenses and World Bank loan obligations.

3. Thus, to make the system financially viable, some storage facilities must be disposed of.

4. The study finds that only approximately one half of the warehouse capacity was used during the peak period 1989-90 before any divestiture steps were taken.

5. The recommendations of the study included:

a) canceling plans for all new warehouse construction under the World Bank project,

b) separating the management of the warehouse facilities into an independent subsidiary company with the Bank in the role of a holding company,

c) disposal of unused warehouse capacity including first the rented facilities and then the owned facilities with use of the proceeds for compensation of released employees and rehabilitation of other storage facilities, and

d) initiating an extensive promotional campaign to rent remaining warehouse facilities.

PBDAC responded by reducing the agreement for warehouse construction with the World Bank to eliminate 778 of the proposed 888 warehouses. This avoided a loan from the World Bank of \$20 million.

Another PBDAC response to the Maazawy study was a request for data from each BDAC for their latest estimate of storage capacity and need for storage for future bank lending purposes. Banks in Egypt usually store commodities such as grains and fertilizer on which they make loans. Responses to this survey revealed that some rented shonas have recently been returned to the owners.

The preliminary PBDAC plan to reduce warehouse capacity is presented in full in Figure 8.8 (Annex VII). This plan pointed out that there are some serious operational problems involved in the disposal of the storage space. The major problems include:

- 1) Determining the Banks needs for storage for bank lending operations by location.
- 2) Obtaining copies of all leases and land ownership documents to perform a legal search before any leases can be broken or land can be sold.
- 3) A decree now exists which prohibits the use of the land now used for storage for any other purpose. If this decree can be changed, the sale value of these sites would be greatly enhanced since much of this land lies in urban areas and the total current quantity of storage facilities in Egypt is in excess supply.
- 4) The Egyptian tax laws now in existence would treat capital gains from the sale of these properties as taxable income unless the proceeds are used to buy similar properties, or upgrade other existing properties, within two years. The tax rate is 42.5 percent. Efforts will be made to get decree this changed.
- 5) The need to follow procedures which will result in obtaining reasonable prices on all properties sold.

The preliminary plan submitted by PBDAC included the following two major points: 1) submit a comprehensive plan for the reduction of storage facilities, including the methodology used to justify the retention of storage for bank lending purposes by March 31, 1994, and 2) to dispose of at least 25 percent of its storage facilities by Dec. 31, 1994.

### **Loan Classification**

During FY 1992/93 a verbal or non-official agreement was reached between PBDAC and the Central Bank of Egypt in regard to implementing Central Bank Directive 321. Under Law 117, PBDAC is allowed to accept land mortgages as collateral for medium and long term loans as long as these are all First or Priority Mortgages. And in addition, PBDAC and the Central Bank have agreed that each loan must be reviewed on a case by case basis by the BDAC management and the general auditors.

According to this agreement a group of 235 loans were classified as "Bad" under Directive 321 during the period from May 1, 1992 to April 30, 1993. These 235 loans had an original principal amount of LE 11,832,507 but had grown to a total amount of LE 17,781,835 including principal, interest and penalties. As of April 30, 1993 these 235 loans have all been settled after discounts totaling LE 2,541,355 were granted by the Bank under Law 35 of the Central Bank. Thus, a total of LE 15,240,480 was received in full settlement on this group of "Bad" loans. This cleared out all loans of this classification as of April 30, 1993.

## Reconciliation of accounts receivable with GOE

This Benchmark calls for an annual reconciliation of accounts with the GOE (Ministry of Finance) and negotiations to either reduce the amounts receivable by PBDAC, accrue interest on the accounts due, or write off these balances. Table 8.4 presents data on the accounts with the Ministry of Finance as taken from the consolidated Balance Sheet for PBDAC as of June 30, 1993. The amounts due to PBDAC are primarily for subsidies on fertilizer, seeds, interest on farm loans, and insecticides for the cotton pest control program in prior years. The amounts due to the GOE are for interest on loans with the central Bank and taxes due.

These data indicate that the net amount due to PBDAC was reduced substantially in 1990 but has been increasing slightly since June 1991. PBDAC management has conducted an annual reconciliation of these accounts but it has not been successful in getting the GOE to reduce the net amount due to PBDAC. Hopefully, since the level of subsidies on inputs has been drastically reduced in the last two years, these amounts will soon be paid to PBDAC.

Table 8.4. Accounts receivable and payable to GOE by PBDAC.

Fiscal years ending June 30:	Accounts with the GOE:		
	Receivable	Payable	Net
	(Million LE)		
1989	802	366	436
1990	734	483	251
1991	442	222	220
1992	489	217	272
1993	485	175	310

Source: Consolidated PBDAC Balance Sheet, June 30, 1993.

## Conclusions

- o PBDAC has initiated a voluntary early retirement program to reduce redundancy of employees involved in non-banking activities. As of May 24, 1993, 1,415 employees had applied for early retirement. These applications were processed on June 15, 1993. A three year plan for personnel reduction was prepared and submitted to USAID for approval.
- o PBDAC has begun to lease its excess capacity in storage warehouses. As of June 30, 1993 approximately 5 percent of PBDAC's warehouse space was being rented but over 80 percent of the total available space was unused.

PBDAC presented a preliminary proposal to reduce excess warehouse capacity following the recommendations of the consultancy report. The plan outlined the remaining problems and the steps to be taken and target dates to accomplish these steps. The PBDAC agreed to reduce its storage facilities by 25 percent by Dec. 31. 1994 if several legal problems can be dealt with.

- o The PBDAC has made progress on loan classification and is arranging settlement of all bad loans.
- o The PBDAC has held an annual reconciliation of accounts with the GOE (Ministry of Finance) but has not been successful in persuading the GOE to pay the amounts due to PBDAC.

## BENCHMARK NO. 9

### AGRICULTURAL SEEDS

#### Introduction

The MALR has had a program of production of all major agricultural seeds under contract with farmers and distributed through PBDAC. Policy reforms call for the privatization of the production and distribution of most seeds. The Central Administration for Seeds is to be changed from a seed production agency to a seed inspection agency.

**Benchmark:** "The MALR will continue to implement reform measures in the agricultural seed processing and marketing sector including:

- show progress toward the ratification and the adoption of new national seed legislation as reviewed by the National Seed Council(NSC) and as recommended by the 1991 National Seed Conference which establishes a seed policy formulation mechanism, seed quality standards, standards for certification and seed protection, general provisions for seed trade, and a schedule of fees to cover the cost of the regulatory and support services provided by the Central Administration of Seeds (CAS);
- proceed with CAS reorganization and privatization of the MALR seed processing plants according to the phased plan agreed upon in tranche V and show achievements of specific steps pursuant to the agreed upon timetable.
- The following benchmark is included for the cotton seed processing and marketing sector: completion of a phased plan by December 31, 1992 acceptable to both MALR and USAID to liberalize certified cotton seed production and processing."

## DECREES AND OFFICIAL ANNOUNCEMENTS<sup>42</sup>

### New seed legislation

Decree No. 816 of the Minister of Agriculture was issued in June 1992 to establish a committee to study and propose new seed legislation (See Figure 9.1, Annex VIII). This decree also authorized this committee to employ a consultant to assist in drafting new seed legislation.

This committee employed a consultant, Dr. James C. Delouche, who completed preparation of an English draft of the enabling seed legislation and rules and regulations during 1992. Translation into legal Arabic of the enabling legislation and the rules and regulations for implementation was a slow process. A progress report on 14 Nov. 1993 by Dr. Waniss indicates that the new laws are being reviewed by the National Seed Council and they expect to complete this review of the enabling legislation and detailed rules and regulations by Feb. 1994 at which time it will be reviewed by Dr. Delouche or some other expert in seed laws.<sup>43</sup> It is important to note that the delays in adoption of new seed legislation have not interfered in any aspect with privatization reforms in the seeds program.

A draft of the a new Ministerial decree dealing with the terms and conditions of the production of agricultural seeds has recently become available and is included as Figure 9.11 in Annex VIII. This draft decree is currently under review by the National Seeds Council. An amendment to this decree is also being currently drafted (March 1, 1994) by the seed consultant which is designed to protect intellectual property rights involved in the discovery and development of new seed varieties.

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English translations of various documents are presented in Figures 9.1 to 9.11 in Annex VIII to this report. Preparation of the report for this Benchmark was greatly facilitated by two consultancy reports by Dr. James C. Delouche on the seed sector during 1993. Report #1 dealt with the period Feb.- April, 1993 which dealt with progress on seed reforms in Egypt. Report # 2 also dealt with seed reforms and with improvements and liberalization of cotton seeds systems in Egypt. These reports are available at USAID/Cairo.

See Sections 7.1 and 7.2 of the first seed consultancy report cited in footnote 1 and page 55 of the second consultancy report.  
and Figure 9.10, Annex VIII.



## **Formation of a National Seeds Council**

A new National Seeds Council (NSC) was appointed and held its first meeting in June 1992. It has continued to meet regularly since then and has addressed issues including reorganization of CAS, the transfer of seeds production to the private sector, seed certification and quality control functions of the new CAS, new MALR policy on maize seed production and marketing, pricing policy for self-pollinated crops, current plans for privatization of rice seeds, and privatization of cotton seed. In the opinion of the seed consultant, "The NSC, which was given major leadership, guidance and monitoring responsibilities in the Seeds Sector Reform Plans has responded in a manner that has far exceeded expectations"<sup>44</sup>

## **CAS reorganization**

The Central Administration for seeds (CAS) formerly had responsibility within MALR for the production and distribution of a large number of agricultural crop seeds and the certification of all seeds. Under the policy reform program it is intended that CAS will discontinue its operations in seed production and distribution and concentrate in the future on seed quality aspects such as inspection and regulation of the private seed sector. A major accomplishment has been made in this regard with the development of the organizational structure of two new organizations. The old CAS has been split into the new Central Administration for Seed Production (CAPS)<sup>45</sup> and the Central Administration for Seed Certification which will retain the old acronym CAS. The proposed organizational structure of CAPS is shown in Figure 9.2 and the proposed organizational structure of CAS is shown in Figure 9.3.

All seed production and distribution functions are to be transferred to CAPS and/or the private sector. As privatization proceeds, this agency will gradually withdraw from seed production. This agency will gradually disappear with eventually only something like a Public Seed Company remaining to take up the production of any residual or "left over" seed production which cannot be privatized. It is anticipated that some minor seeds, which will be unprofitable to produce and market privately, will remain in the public sector for some time.

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See Section 1.2.1 of the first seed consultancy report and page 61 of the second consultancy report cited in footnote 1.

As of March 1, 1994 this seed production agency will be named General Department for Seed Production (GDSP)

Figure 9.2

Not Supplied By Originating Office

Figure 9.3

Not Supplied By Originating Office

Under the new organization, CAS will retain and strengthen its functions and responsibility as the public sector overseer and enforcer of quality standards and control procedures to assure that seeds marketed to farmers are of adequate quality and that the public and private participants in the seeds industry compete on an equal basis.

The process of separation of the seed production and seed certification activities has been delayed by the need for approval of these reorganization plans by the Central Agency for Organization for Management. This delay was resolved in late 1993 so that reorganization can proceed.<sup>46</sup>

### **Privatization of MALR Seed Processing Plants**

When MALR seed processing plants were offered for sale to the private or co-operative sectors, no interest was expressed in these plants. These plants will thus continue to be operated by MALR. It has been recommended that a portion of the capacity of these plants be made available to private and co-operative sector firms who are involved in the privatization of self-pollinated seeds at rates reflecting only operating costs to reduce the upward price pressure on seed privatization.<sup>47</sup>

During late 1993 some progress was reported in this regard. A new seed company has been formed by former employees of Pioneer Misr which has used some of the seed plants of the MALR on a custom basis. It is anticipated that renting and custom use of MALR seed plants will expand and may eventually lead to a sale of these facilities.<sup>48</sup>

It should be noted that several seed experts familiar with the Egypt situation consider the redundancy of employees in the public sector seed plants to be the major barrier to privatization.

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See Section 3.2 of the first seed consultancy report and pages 61 and 62 of the second consultancy report and Figure 9.10, Annex VIII.

See Section 6.2 of the first seed consultancy report.

See page 62 of the second seed consultancy report and Figure 9.10, Annex VIII.

## **Privatization of Seed Production and Distribution**

Figure 9.4 contains an English translation of an advertisement that appeared in the issues of Sept 4, 5 and 6, 1992 of the Al Ahram, El Akhabar, El Gomhoria, and El Waffed newspapers asking for private sector tenders on privatization of the production and distribution of seeds (Annex VIII).

Nineteen firms responded to this advertisement. On Sept. 28, 1992 representatives of these firms met with the Head of the CAS for a discussion of the process of privatization of the seed distribution activity (Figure 9.5, Annex VIII).

The Committee for Evaluating Proposals for Seed Production and Marketing Franchises met on Oct. 5, 1992 and made their recommendations on the awarding of franchises for seed production and distribution (Figure 9.6, Annex VIII). Nine of the firms were rejected for reasons given in the minutes of the meeting. The franchises approved, by crop and Governorate are listed in the minutes.

Figure 9.7 (Annex VIII) contains an English translation of a memo from the Egyptian Agricultural Company for Seed Production, one of the private sector firms which had been selected to distribute seeds for the MALR, to H.E. Dr. Youssef Wally, Deputy Prime Minister & Minister of Agriculture and Land Reclamation regarding the subject of " Substituting the private sector companies for Ministry of Agriculture in seed production". This memo provides a detailed description of the costs of production for wheat and bean seeds and states that the private sector companies will suffer losses from seed production at the CAS established seed prices and asks for the government to provide funds to cover these losses. Thus, it was a request for a temporary subsidy.

MALR did not respond to the request for subsidy and thus privatization of the seed production and distribution had been temporarily halted. The production and distribution of seeds for the winter 1992/93 and summer 1993 crops remained in the hands of the MALR.

By April 1993, plans had been made for the Holding Company for Rice Milling and Marketing and the General Agricultural Co-operative for Rice and Grains Crops Production to enter into the production of rice seed during the summer of 1993 for rice seed to be available for the 1994 crop. These two firms had been selected in October 1992 to participate in the limited franchise program. Agreement has been reached between these firms and CAS for the Rice Holding Company to contract with farmers in selected areas for 15,000 feddans of rice for seed and for the Rice Co-op to handle contracts for 2,000 feddans. CAPS will contract for an additional 23,000 feddans. Thus, a total of 40,000 feddans of rice will be produced under contract with farmers in the same manner as done in prior years by CAS, but in 1993 the private

sector firms will share in the process by handling about 40 percent of the total production of certified rice seed.<sup>49</sup>

The parties involved have agreed that prior to the time when this seed is sold in the spring of 1994 they will jointly agree on a selling price. Thus, the impasse on seed pricing has hopefully been broken, at least in the case of rice.

CAS has also agreed that these two firms will have access to MALR seed processing plants to condition the 1994 rice seed and access to MALR employees needed for their expertise in seeds on a leave-without-pay basis. These appear to be good steps in the transition process.

The same procedure will likely be followed with the Holding Company for Rice in regard to wheat seed production beginning with the 1993-94 winter season. Privatization of these two major crops will represent great strides in the privatization process.

In a Memo to the Minister of Agriculture and Land Reclamation Eng. Mohamed Salah A. Waniss, for Seeds Affairs reported the following:

"Within the framework of the Department's endeavor for separating production from certification, which includes allowing the private sector to participate in the production of field crop and vegetable seeds, and limiting the Ministry's role to quality control through both field and lab inspections which apply techniques of the highest standards to ensure good quality, the following has been accomplished:

1. The co-operatives have began the production and distribution of 5,000 feddans of rice for seed for the 1993/94 season.
2. The Rice Millers have began the production and distribution of 15,000 feddans of rice seed for the 1993/1994 season.
3. The Egyptian Company for Seed Production has started the production and distribution of wheat and fava bean seeds.
4. Arrangements are on-going for coops to begin the production and distribution of wheat seed for the 1994/1995 season."

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As mentioned in Benchmark 2 on rice, the Rice Holding Company and all of its subsidiary companies is in the Public Enterprise Sector which operates for profit as do private companies although they are still largely owned by the public sector. Companies in the Public Enterprise Sector are intended as a first stage towards privatization.

Privatization of the distribution of government certified seeds has been hampered by the lack of information on the costs of production and operation of seed processing plants and the subsequent disagreement on the proper price to set on certified seed. The private sector has been generally demanding a price at about three times the farm price for equivalent grain whereas the government recommended price was only 1.5 times the farm level price. A recommendation by a seed expert is that a reasonable price for certified seed is about twice the commercial farm level price.<sup>50</sup>

The CAS/GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit) Improvement of Seed Production and Supply Project is trying to alleviate part of this problem by investigating the costs of seed production and processing.

GTZ is also studying the question of the benefits to the farmer of purchased certified self-pollinated seed. When farmers in Egypt retain their own seed they typically do not properly care for, clean or treat the seed for diseases and thus suffer from large losses from seed borne diseases. As a result, some seed experts in the MALR recommend replacement of 70 to 100 percent of farmer seed each year. This is an abnormally high replacement rate. Farmers in West Europe and USA normally replace only 20-30 percent of self-pollinated seeds each year. An optimal rate of privatization replacement depends upon the practices used by farmers in treatment of their own retained seeds and the costs of certified seeds. Important research and extension on these project topics is being addressed in this GTZ project.

An example of the extension activities of GTZ was a Workshop on Privatization of Seed Production in Egypt held in January 1994 which dealt with many of the privatization problems of the seed sector including cost accounting of seed production, profit margins of seed merchants, effects of privatization on national income, redundancy of employees in public seed plants, and operation of the new CAS. The workshop was addressed to government policy makers and potential private sector seed merchants.

The GTZ efforts are not in conflict with that of the APC Policy Reform Project but in fact complement this project by providing some needed technical assistance.

### **Liberalization/privatization of cotton seed**

Figure 9.8 (Annex VIII) contains an English translation of Decree No. 1482 of 1992 by the Minister of Agriculture and Land

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See pages 23-28 of the first seed consultancy report.

Reclamation which appointed a coordinator between the CAS and the Egyptian Cotton Fund. This step was needed before the initiation of cotton seed liberalization. The matter of proper jurisdiction of the CAS versus the Egyptian Cotton Fund was discussed at a meeting of the Seed Council on Nov. 11, 1992 (see Figure 9.9).

Due to biological reasons, cotton seed cannot be retained by cotton producers but is separated from cotton lint during ginning. Since the separation of cotton seed from lint is performed by the cotton gins, the process of privatization of cotton seed production and distribution is closely interrelated with the privatization of cotton gins.

The seed consultant, Dr. Delouche, prepared a report on cotton seed improvement and privatization.<sup>51</sup> He describes the current GOE system of cotton seed production as simply the use of gin-run seed with no improvement thus resulting in a use of 60-70 KG of seed per feddan at a cost/feddan to the farmer similar to that of a cotton producer in USA using high-quality seed. The present technology also represents a very large cost to Egypt in terms of loss of cotton seed for commercial use. Improvements in technology include some type of delinting process which will allow the seed to be mechanically cleaned, sorted and graded and also treated for disease and insect control.

A major premise underlying the consultant's recommendations is that reform in cotton seed distribution is relatively meaningless without substantial improvements in cotton seed quality. In other words, little gain in cost reduction can accrue to the cotton producer through privatization with the current seed technology. Improvements in technology which would reduce the quantities of seed needed per feddan to as low as 10 to 20 KG/FD would permit cost savings and present some opportunities for improvements through privatization.

The consultant recommends that the only currently viable alternative to cotton seed distribution by CAS/CAPS is by the cotton gins. Thus, necessary actions should be taken to permit the ginning companies to enter into cottonseed distribution and as the gins become privatized, cotton seed distribution can and will gradually also become privatized. The gins do not currently have the equipment or facilities for cotton seed improvement but they could make such investments if they were allowed to profit from such investments, or they could utilize, through custom or rental arrangements, the facilities of other companies or of the MALR if and when such facilities become available.

Dr. Waniss reports that the CAS agrees with the consultant's report on cotton seed privatization and that the CAS has taken

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Part I of the second seed consultancy report.



steps to begin to delint some cotton seed for the 1994 cotton crop which will start toward the accomplishment of the cotton seed improvement, and eventually the privatization, as recommended by the consultant.<sup>52</sup>

## **SURVEY RESULTS**

### **Privatization of Seed Distribution**

A survey of 25 firms who operate in the seed production and distribution sub-sector, 17 public sector, one cooperative, and 7 private sector, were interviewed during February-March, 1993 to obtain their opinions regarding the privatization of seed production and distribution.<sup>53</sup> The public sector firms are primarily the seed directorates in the governorates pertaining to CAS. The seven private sector firms were selected from the 19 firms that submitted tenders to distribute seed for MALR.

The majority of the firms included in the survey (72 %) operate in only one governorate, however two private sector firms stated that they operated throughout the country.

The average public sector firm dealt with 6-7 types of seeds while most of the private sector firms had in the past dealt with only vegetable seeds. The two private sector firms that operated country-wide dealt in maize, vegetables, and some other seeds.

Three of the private sector firms had been selected by the CAS awards committee to participate in the concessions for privatization of seed production and distribution with MALR.

Only two of the 25 respondents (8%) were of the opinion that privatization of seed production or distribution was not a good idea. The reasons given by these two responders, both from the public sector, was that the private companies would not participate in the current plan because the recommended prices did not cover production costs. This response does not say that privatization is bad, only that the present privatization plan may not succeed.

But one respondent also felt that private firms would make too much profit and sell poor quality seed to farmers. Thus, we can conclude that only one of the 25 respondents (4%) was of the

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See Figure 9.10, Annex VIII.

An English translation of the questionnaire used in this survey, and the response codes are provided in Annex IX.

opinion that privatization of seed production and distribution is not a good idea.

When asked about remaining government restrictions that may interfere with privatization, more responses were obtained from the public sector than from the private sector. Fifteen of the 17 public sector firms (88%) cited some GOE restrictions. The 15 firms listed 16 different restrictions and a total of 37 responses. These responses were quite varied. Some responses, such as "distribution problems" (4 replies) were too vague to be helpful. Nine respondents from the public sector (53%) were of the opinion that the current proposal for seed privatization placed too many restrictions on private sector firms, such as area and quantity restrictions. Five respondents (29%) felt that seed prices were too high and two firms (12%) said that dealers should be allowed to lower seed prices. Three firms mentioned less incentives for workers, two firms mentioned "no financing", and three firms were critical of the official inspection as being too slow or not efficient.

On the private sector side, three firms (43%) mentioned any GOE restrictions to privatization. One firm said that current seed legislation is improper for the private sector. This need has been recognized. One firm said there were distribution problems but gave no details, and one firm said that the government forces private sector firms to accept bad quality seed to obtain good quality seed. We hope this is not generally true.

A question asking for opinions on the current MALR seed privatization proposal brought out more agreement among the public sector responses. Eight public sector respondents (47%) voiced the opinion that private sector firms should be allowed to produce seed under the supervision of CAS. Seven respondents (41%) said privatization should be gradual, seven(41%) said that privatization creates competition and encourages the private sector to produce high quality seeds, six (35%) responded that privatization should be limited to open pollination crops like cotton and wheat, two (12%) felt that private firms should be allowed to sell anywhere in the country, and three(18%) felt that there should be complete separation of seed distribution and quality control. Thus, in general, the public sector respondents favored privatization and even perhaps favored more freedom for private sector firms than the private firms proposed.

All private sector firms agreed that privatization would create competition and result in high quality seeds. Three firms(43%) felt they should be allowed to operate throughout the country without limit, and one firm (14%) felt that prices should be determined by supply and demand.

In regard to incentives needed for the private sector to encourage competition, six of the private sector firms (86%) said that more companies or outlets should be allowed to sell seeds, two firms (29%) agree that CAS should supervise the stages of

production, distribution and inspection and two firms (29%) said they wanted more assistance from agricultural extension. One firm said there were too many restrictions in the current system, and one said importing should be made easier.

The public sector responses were quite varied, but 41 percent of the respondents agreed that more seed outlets should be allowed.

In conclusion, there is strong support for privatization among the respondents. The concession system defines limits to each private sector firm by crop and by governorate. The survey indicates that the group of firms interviewed do not fully support all of the specifications of this system, many favoring more individual freedom, thus, CAS should occasionally review these specifications to determine if more private sector freedom would create more efficiency in production and marketing and result in lower seed prices and higher seed quality.

### **Survey of input merchants**

The surveys of private sector merchants (see Annex III) indicated that a large number of private sector seed merchants exist in the country who deal primarily in vegetable seeds which are mostly imported. These merchants would constitute a ready market for seed distribution through the private sector. Surveys of farmers also show that co-operatives are playing an active role in seed distribution (See Annex Tables 4.8 and 4.9).

## Conclusions:

- Enabling legislation needed for privatization of the seed sector have been drafted. The new draft Ministerial decree dealing with seed production is now under review by the National Seed Council and was reviewed by a seed consultant in February 1994. **Delays in passage of new seed legislation have not hampered reforms in reorganization of seed production, distribution or of seed policy.**
- The new National Seeds Council has been fulfilling its role in providing leadership, overall guidance and formulating policy for seed reform since June 1992.
- Reorganization of CAS required approval by the Central Agency for Organization for Management. This approval was obtained in late 1993.
- Private sector and co-operative firms have, as yet, shown no interest in purchasing MALR seed processing plants but some contracts have been signed for the rental and custom use of some of these plants. Custom and rental use will hopefully lead to later sale of these seed plants.
- Privatization of the production and distribution of self-pollinated seeds has been delayed by disagreement over seed pricing policy. Targets for privatization of seed distribution for the winter 1992-93 season or summer 1994 were not met. However, **steps toward privatization of rice seed production were initiated in the summer of 1993 and similar steps were made on wheat and bean seed production in the winter 1993-94 season.**
- The privatization of cotton seed was studied by a consultant in September, 1993. The Consultant's report indicates a need for improvement in cotton seed technology before privatization will likely proceed. CAS has initiated steps to improve cotton seed technology in 1994 through mechanical delinting.
- **Thus, progress is being made on all aspects of the seed reform program.**

## BENCHMARK NO. 10

### AGRICULTURAL MACHINERY

#### Introduction

This is the first tranche in which agricultural machinery are included in the APCP policy reform program.

**Benchmark:** "All restrictions on the importation, trade, marketing and manufacturing of agricultural machinery by private sector will be eliminated."

#### OFFICIAL DECREES

**A decree of the President of the Arab Republic of Egypt and Minister of Finance published on August 6, 1992** lists the new import customs tariffs on 106 commodities which can be imported. These new tariffs apply from the date of publication. This list includes **agricultural tractors of 20 to 85 horsepower which can be imported with a customs duty of 50 percent.**

In addition, the decree lists 78 commodities which are prohibited from imports. The major items listed included ready-made clothes, carpets, furniture, fabric materials, soap, and chickens. No agricultural machinery or equipment items are included in this list of prohibited items and, thus, **all other types of agricultural machinery and equipment can be imported with no customs duty.**

The decree also specifically listed those items which previously were prohibited from import but which now can be imported. This list includes agricultural tractors from 20 to 85 horse power. These size tractors are specifically mentioned because they are produced domestically and previously were protected completely with the ban on imports.

#### **Decree No. 432 of 1992 of the Minister of Economy:**

Appendix # 4 of this decree lists items that can be imported under certain conditions, including the following:

Diesel generators, 700 Kilovolt, can be imported after obtaining permission from the General Organization for Industrialization .

**Decree no. 38 for 1994 of the President of the Arab Republic of Egypt and Minister of Finance published on Feb. 13, 1994** lists the new import customs tariffs for a large number of commodities which can be imported (See Figure 10.1). In this Decree the customs duties on small farm tractors was reduced to 10 percent

and the duty on tractors from 20 to 85 horsepower was reduced to 40 percent.

## SURVEY RESULTS

A survey of machinery merchants was conducted to verify that all restrictions on the importation, trade, marketing and manufacturing of agricultural machinery by private sector have been eliminated.<sup>54</sup>

The survey sample included 19 firms. Of the 19 firms, 16 operate in the private sector, 14 firms import agricultural machinery, 12 were manufacturers, all 19 sold to wholesalers and 18 also sold directly to farmers. PBDAC was one of the 19 firms interviewed.

Of the 19 firms, 18 sold machinery throughout the Republic of Egypt and one firm sold only in the new lands. The average year of establishment of these firms was 1964 but one firm was started in 1898.

The respondents were asked the following question:

**"Are there any Government of Egypt regulations which interfere or cause difficulties in the agricultural machinery and equipment business?      YES \_\_\_\_\_ NO \_\_\_\_\_"**

**If YES, List these regulations."**

Six of the 19 firms responded NO to this question. The 13 firms who responded YES gave the following responses (Some gave several responses):

<u>GOE regulation which causes difficulty</u>	<u>No. of responses</u>
Sales tax	9
Customs duty	6
Increase in customs duty	3
Not permitted to import	2
small tractors that I want to import.	

The sales tax cannot be considered as a constraint on trade of machinery any more than any other item. It is a relatively new tax in Egypt and thus disliked by merchants as are almost all taxes. The customs duties referred to was the 50 percent duty mentioned in the presidential decree of 1992.

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An English translation of the questionnaire used in this survey, and the codes for the responses can be found in Annex IX.

The two firms which reported difficulty with importing small tractors were referring to the specific items referred to in the Presidential decree. Obviously the managers of these two firms were uninformed of the Presidential Decree of August 1992. In the winter survey of fertilizer and seed merchants (Annex III) some questions were asked about their sales of farm tools and machinery. Only 9 merchants in the entire sample reported dealing in these items. Of the 9 interviewed, only one merchant reported that there were any governmental regulations which affected his business in machinery sales. He complained of the need for a license which raised his costs of operations.

## **Conclusions**

- o Based on the review of the latest official decrees, and the reactions of the agricultural machinery marketing sector, importation, manufacture, or trade of farm machinery is permitted.
- o The 40 percent customs duty on the importation of tractors of 20 to 85 horsepower remains as a protection to the local manufacturing industry.
- o The complete restriction on importation of farm machinery has been removed and thus the benchmark has been met. The extent to which the 40 percent customs duty on tractors will effect imports, or impact on farm costs and returns, is unknown.

Figure 10.1. Presidential Decree no. 38 of 1994.

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**PRESIDENTIAL DECREE  
NO. 38 OF 1994  
CONCERNING THE COORDINATED TARIFF**

President of the Republic.

- Mindful of the Constitution,
- And the Customs Law no. 66 of 1963.
- And Presidential Decree No 351 of 1986 promulgating the Tariff, amending and complementing the regulatory laws,
- And mindful of the approval of the Higher council of Tariff.
- And of the approval of the Council of ministers.

(The Decree here specifies modes of tariff collection and authorizes the Minister of Industry to issue the explanatory notes for the Tariff tables.)

This decree lists the following items and the percentage tariff.

<u>Item</u>	<u>Description</u>	<u>Percentage</u>
01 31	Fertilizers of plant or animal origin even if they are mixed together or chemically treated.	5 %
02 32	<u>Nitrogenous Fertilizers</u>	
10	Urea(even if in aquatic form)	30 %
20	Mixtures of ammonium sulfates and ammonium nitrates	30 %
21	Ammonium sulfates	10 %
29	Others	30 %
30	Ammonium nitrates	30 %
40	Mixtures of ammonium nitrates and Ca CO <sub>3</sub>	30 %
50	Sodium nitrates	30 %
60	Mixtures of ammonium nitrates and calcium nitrates	30 %
70	Calcium Cynamide	30 %
80	Mixtures of urea and ammonium nitrates in aqueous form	30 %
90	Others(mixtures)	30 %
03 31	<u>Phosphorus fertilizers</u>	
10	Super phosphates	30 %
20	By-products of de-phosphorization	30 %
90	Others	30 %

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Figure 10.1 cont.

04	31	<u>Potassium fertilizers</u>		
		Karmalites and sulfites and natural potassium salts from a different ore	5 %	
		Potassium chloride (K CL <sub>2</sub> )	5 %	
		Potassium sulfates(K <sub>2</sub> SO <sub>4</sub> )	5 %	
		Others	5 %	
05	31	Mineral or chemical fertilizers containing 2 or 3 nutrients (N, K, or K). Products in concentrated forms, in packages weighing not more than 10 KG	5 %	
		Fertilizers containing N, P. or K	5 %	
		Hydrogen ortho-phosphate diammonium	5 %	
		N or P chemical or mineral fertilizers	5 %	
		Fertilizers containing P and K	5 %	
01	87	Tractors		
	10	Small Agricultural Tractors	10 %	
	20	Road Tractors	60 %	
		Large Agricultural Tractors		
	11-90	From 15 to 63 watts(20 to 85 H.P.)	40 %	
	11-90	Other	10 %	

## **OTHER AGRICULTURAL POLICY REFORMS**

The GOE, in its program of economic policy reform has performed other agricultural policy reforms which were not specified in any of the benchmarks in the original MOU or any of the amendments to the APCP policy reform program. These reforms are reported here to indicate general progress by the GOE in policy reform.

### **OFFICIAL DECREES**

#### **Liberalization of Agricultural Exports**

The issuance of Ministerial Decree No. 458 (Figure 11.1) has clarified two major issues regarding agricultural exports. The issues of concern are the prices set by the commodity export committees and the export licenses. This decree clearly states that such prices are "guiding" prices only and, thus, do not constitute either minimum or maximum prices. Also, this decree states that no export licenses are needed from the export committees. Implementation of this decree is documented by the letters and announcements in Figures 11.2 through Figure 11.4.

#### **Wheat flour**

Figures 11.5 and 11.6 (Annex XI) present English translations of official decrees issued during 1992 which confirm a change in the GOE policy to completely eliminate all restrictions on the importation and trade of wheat flour. Although wheat flour is not mentioned in the Benchmarks in the latest Amendment of the MOU, these decrees are included here to demonstrate general progress by the GOE toward liberalization of the food markets in Egypt.